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The Health Bulletin

Published by THE NORTH CAROLINA STATE BOARD OF HEALTH

This Bulletin will be sent free to any citizen of the State upon request.

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Vol. 52

JANUARY, 1937

No. 1

STATE CAPITOL AT RALEIGH



The State Capitol is considered one of the most beautiful buildings in North Carolina. In this building the Governor and other State officials have their offices. In it also the General Assembly meets in biennial sessions to enact laws and make appropriations to run the State Government.

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The State Board of Health publishes monthly THE HEALTH BULLETIN, which will be sent free to any citizen requesting it. The Board also has available for distribution without charge special literature on the following subjects. Ask for any in which you may be interested.

Adenoids and Tonsils	German Measles	Scarlet Fever
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The following special literature on the subjects listed below will be sent free to any citizen of the State on request to the State Board of Health, Raleigh, N. C.

Prenatal Care (by Mrs. Max West)	Baby's Daily Time Cards: Under 5 months;
Prenatal Letters (series of nine monthly letters)	5 to 6 months; 7, 8, and 9 months; 10, 11, and 12 months; 1 year to 19 months; 19 months to 2 years.
Minimum Standards of Prenatal Care	Diet List: 9 to 12 months; 12 to 15 months; 15 to 24 months; 2 to 3 years; 3 to 6 years.
Breast Feeding	Instructions for North Carolina Midwives
Infant Care. The Prevention of Infantile Diarrhea	
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In Retrospect and Prospect

JUST sixty years ago this month, the bill to enact a law creating the State Board of Health was introduced in the Legislature of 1877 then in session. The measure, much amended and changed from its original form, was finally enacted into law on February 12, 1877. The appropriation made by the Legislature for the inauguration of the work was \$100.00 a year. The Medical Society of the State of North Carolina was designated as the State Board of Health.

At that time the State was hardly out from under the oppressive heel of the conquering North. Only three years before the last Federal soldier had been removed from Raleigh. Many of the people were in extreme poverty. There was much preventive illness, such diseases as typhoid fever, malaria, smallpox, and the bowel diseases of infants were prevalent in practically every section of the State.

Dr. Thomas F. Wood of Wilmington was the leading spirit in the movement creating the Board of Health. The Medical Society of the State later designated him as the first Secretary, or State Health Officer. Naturally the appropriation of \$100.00 a year was hardly sufficient to pay the postage on the necessary correspondence. Dr. Wood conducted the office from his home in Wilmington where he was editor and publisher of a successful Medical Journal.

In 1878 he published the first educational pamphlet on a health subject ever published by the State Board of Health. The title was "Timely Aid for the Drowned and Suffocated." This was in the summer months. There were few bridges across the streams of the State. In freshets which were common, many of these flimsy structures were destroyed. All physicians traveled on horseback for the greater part of the year. Saddlebags in which to carry their medicine was the most important part of the physicians' equipment. Death by drowning was, therefore, very common in undertaking to cross these swollen streams.

By the time the Legislature of 1879 met, it was seen that the plan of having the State Medical Society to act as the State Board of Health was not practical and, therefore, an amendment to the law creating a Board of Health very similar to the present set-up was enacted. The appropriation was increased from \$100.00 to \$200.00 a year, at which figure it remained until the General Assembly of 1885 increased it to \$2,000 a year.

Dr. S. S. Satchwell of Pender County was the first President of the Board of Health. During 1879, following the amendment to the law, several educational pamphlets were issued. One of these was entitled "Limitations and Prevention of Diphtheria." This was long before the discovery of diphtheria

anti-toxin, and the disease was more than horrible to contemplate. Physicians had no effective treatment available and numbers of children died annually from it. It is significant to point out here that while diphtheria anti-toxin has been available to physicians now for about forty years, and for some fifteen years a preventive treatment has been available, yet the State Board of Health during the past fall has been more concerned with the prevalence of diphtheria in the State than with any other problem.

Throughout all the vicissitudes of the past sixty years, the State Board of Health, however, has maintained its chief objective and that is the prevention of the spread of communicable diseases and the promotion of better health for all the people. The result of the work done in the field of preventive medicine and public health during these sixty years stands out as one of the most important contributions to civilization. The span of life has been increased during that time more than twenty-five years. This has been largely accomplished through the control of epidemic diseases such as bubonic plague, malaria fever, typhoid fever, and smallpox, and particularly through the prevention and control of the fatal diseases of childhood.

This new year finds a State Board of Health grown to maturity in many respects. An organization proud of its past history, but fully conscious of its responsibility to the future needs of the people. At present there is some form of whole time health department service in operation in seventy-one counties. Among the remaining twenty-nine counties, however, there are eight or ten counties with large population and much wealth whose people are but little better acquainted with the manifold advantages of a modern local health department than were the people of sixty years ago. One chief effort of the State Board of Health this year is to try to establish an organized health department in all such counties. Another goal to be striven for this year is the extension of prenatal, obstetrical, and pediatric service into every county, available to the poorest of the population.

The communicable diseases must be brought under better control, and a safe water and milk supply together with modern sewage disposal must be extended far beyond where the pavement ends in all the cities, towns and villages of the State.

Verily, there is plenty of work to be done.

This Is Pneumonia's Busy Season

By THOMAS CLARKSON WORTH, M.D., *N. C. State Board of Health*

WITH the onset of cold weather and the beginning of the New Year, it's time to turn our attention again to a swift and powerful enemy, pneumonia. From now until late February or middle March, judging from past years, the number of cases of lobar pneumonia will steadily increase to its peak, then decline again, at first sharply, until August which

usually has the lowest incidence of any month. Strangely, the number of deaths from pneumonia remains about the same from year to year, except during epidemics of influenza or other severe respiratory infections. More cases occur in the very young and very old, when resistance is lowest; more males than females are affected; more negroes than whites. However, the

most robust may succumb, and in no one does a permanent immunity or resistance develop.

In 1914, pneumonia was second among the causes of death in North Carolina, whereas in 1934, it was fourth; but the number of deaths due to this disease has remained about the same. Our methods of prevention and treatment have had but little effect on the death rate of this disease.

Pneumonia, sometimes called Lung Fever or Inflammation of the Lung, is not one disease, but a group. Usually, it is caused by an organism or germ, the pneumococcus, which is small, round, and occurs in pairs, but a certain percentage of cases are caused by other organisms, notably the streptococcus and a rare bacillus.

We shall speak here only of lobar pneumonia, which can be one of the most rapidly fatal of all infectious diseases. The pneumococcus causes 95% of these cases, large areas of the lung may rapidly become solid, and remain so for a variable time. When recovery occurs the temperature usually drops suddenly—the well-known “crisis.”

Though pneumococci look alike, some of them differ. Thirty-two distinct kinds or types of them are known at present. Types 1 and 2 account for about 60% of the cases of lobar pneumonia, type 3 about 10%, and the remaining types, 30%. What good does it do to determine these types? First, use of an anti-pneumococcus serum when type 1 or 2 are present has proven beneficial, although it is attended with some danger which we shall not attempt to discuss. This serum must be used early to be of any value; best given within three days after beginning of the disease. Second, your doctor can know much more about how the case will turn out if he finds the type of the particular pneumococcus.

Rarely, one may find dangerous pneumococci in a normal person's throat; harmless ones are frequently found. A “carrier” may harbor dangerous pneumococci in his throat for as long as three months, but he is not likely to transmit the disease to a second person unless the latter has a cold. Similarly, a person with lobar pneumonia does not readily spread his infection to another unless the second person has a cold. One writer* states: “Virulent types of pneumococci may occur in the upper respiratory tract as secondary invaders following an acute cold. They are most prevalent on the fifth and seventh day of the cold. Thus exposure to chilling or indiscretion on the patient in the course of a cold, during this invasion period of the pneumococcus, may result in subsequent pulmonary involvement.”

Everyone should recognize the early signs of lobar pneumonia so that he may seek early medical attention. He may notice a headache, a general languor or weakness, a sudden sensation of chilliness, increasing cough, rising temperature, stabbing pain in the side as he draws in each breath, or perhaps he notices his sputum is blood-tinged or rusty. He may begin to breathe more rapidly. When these signs occur, he should go to bed immediately and have someone call the doctor. To secure absolute quiet, adequate nursing care, laboratory tests and any special apparatus such as an oxygen tent, the patient had best be sent to a hospital.

Now from a preventive standpoint, there are several points we might observe. Always, but especially during its busy season, try to avoid excessive dampness, over-exposure, and fatigue. Alcohol is thought to lower the bodily resistance to pneumonia, and should be avoided when there is over-exposure. If you have a cold or some infection of the respiratory system, stay away from

* Smilie: *Public Health Administration in the U. S.*, p. 101.

a case of pneumonia and remain in bed until you are again well—colds can be forerunners of fatal lobar pneumonia. They should not be ignored or belittled. Wear sensible clothing suited to the climate. Avoid over-heated houses. Stay out of irritating dusts, fumes and

excessive smoke. Maintain an adequate diet. Clear up points of infection such as bad teeth and tonsils. Keep the feet warm and dry; never leave on wet shoes and stockings. These precautions are easily taken. They should certainly be heeded during the "busy season."

Our Immediate Task—Take the Tragedy Out of Childbirth

By MRS. J. HENRY HIGHSMITH

AT the beginning of this new year one thing is clear: Tragedy should be taken out of childbirth. Motherhood, which is a woman's most fundamentally significant experience in life should not entail the risk of death and invalidism that it does today for some classes of women. It should be made safe. It should be rid of fear, gloom and dread. Every woman should know wherein lies the means of safety concerning this, her most critical period.

It is the boast of science that it now knows how to combat death in connection with childbirth. Then, for the sake of the mothers who do the dying, and for the good of maintaining the nation, why not try to prevent the most tragic of all deaths, the death of mothers in childbirth?

More women die between the ages of fifteen and forty-five from diseases incident to pregnancy and childbirth than from any other cause, except perhaps tuberculosis, and this in the face of the fact that many of these deaths are preventable. In the United States, last year, more than 15,000 mothers lost their lives from causes incident to giving birth to their babies; in North Carolina more than 500.

But this deplorable situation does not have to remain so. Some communities have already demonstrated that the lives of mothers need not be sacrificed

at childbirth. They have found that good medical care and an informed public that will seek that care, are the keys to the situation. In communities where doctors, nurses and civic leaders work together in providing good care for all who need it, surprisingly few have been the deaths of mothers at childbirth. On the other hand, where ignorance and indifference cause expectant mothers to delay seeking care until it is too late, and where there are no facilities for saving lives, such as trained obstetricians and nurses, and well equipped hospitals, mothers continue to die.

Fortunately, the year 1937 finds a fair beginning made in North Carolina in a permanent program to save the lives of mothers and babies. Already 110 communities in the State, in about 40 counties, are now engaged in maintaining health centers where pregnant mothers can come once a month and seek to learn what constitutes proper prenatal care. The centers are supervised by the public spirited physicians and obstetricians of the community and one or more public health nurses. Here the mothers are given a physical examination and are advised as to their physical needs and safe personal care.

Are the mothers being reached through these centers? During the month of October, when the work in most of the centers was just getting

under way, 1236 mothers attended the clinics. The mothers are interested. Furthermore, they are cooperative and grateful for this service.

What is even more significant and encouraging, women are taking up this fight. Club women, parent-teacher groups and home demonstration clubs are becoming aroused and are asking their physicians, county commissioners, and others responsible for the welfare of their people to take steps to save the lives of the mothers of their community.

Club women especially are interested in an educational program that is intended to reach every woman in the State with the personal message that *"Early and Adequate Prenatal Care Will Greatly Reduce the Risks of Motherhood."* They believe that a better educated womanhood will soon come to demand better obstetrical care for all mothers, as well as more adequate nursing and hospital service.

In their program club women are urging on the part of every club:

1. To know the maternal death rate of its community for over a period of three years and to compare it with the State and national average.

2. To know how many of the maternal deaths were preventable. How many were due to lack of proper obstet-

rical care. How many due to negligence on the part of the mothers themselves or their families.

3. To know what prenatal health services are available to the mothers of the community.

4. To study the bearing of the economic conditions under which the mothers live upon the maternal death rate.

5. To cooperate with the State and county boards of health, local physicians and nurses, superintendents of public welfare, in reaching and caring for indigent pregnant mothers.

For mothers themselves the club woman's program stresses the following points:

1. Examination as early as possible during pregnancy by a competent physician.

2. Subsequent visits by expectant mothers at regular intervals to their physicians.

3. An aseptic delivery by a competent doctor.

4. Post partum examination immediately after delivery and about six weeks later.

5. Adequate post-natal care, including medical and nursing service, and treatment of post partum complications.

Comments On the Engineering Phase of Industrial Hygiene Activities

By M. F. TRICE, Engineer, N. C. State Board of Health

INDUSTRIAL Hygiene activities reveal that workers frequently risk health and even life itself to provide many of the commodities that are in use. The products involving such dangers are diverse. Health hazards, for example, are associated with the manufacture of such unrelated merchandise as false teeth, wall paper, the

garden hose, and even the face powder with which the daily ritual is performed. All may have exacted a toll of health and happiness in their transformation from the crude natural product to finished material. It is one of the paradoxes of the ages that some lives must be sacrificed in order that others may be lived more comfortably.

The situation is more tragic than it need be, for much of the suffering resulting from hazardous occupations may be mitigated or eliminated altogether by the use of recently developed safeguards. By evaluating occupational disease hazards and encouraging the introduction of measures for the protection of the worker, the State Board of Health intends to reduce the number of lives that are yearly placed upon the altar of industry.

The Division of Industrial Hygiene is the department that is charged with the task of preventing the annual sacrifices to occupational diseases. In the execution of a program of industrial preventive medicine the services of both physicians and engineers are required. This segregates the work into medical and engineering activities, and since the scope of both covers many ramifications, it is wise to discuss them separately. Consequently, this is the first of two papers that will be published in the HEALTH BULLETIN on this phase of health work. This address, as the first, will present the engineering phases of the Industrial Hygiene program. Later the medical activities will be presented.

Upon the engineer devolves the task of isolating and appraising the factors responsible for the condition or conditions that are inimical to the health of the worker. An investigation of this kind necessitates the use of knowledge and tools common to several of the major branches of engineering. Probably of major importance is basic training in chemical engineering since occupational diseases, in the main, result from the exposure of the worker to toxic mists, fumes, gases, mineral substances, solvents, and other compounds that are used in manufacturing processes. The extent of the hazard to which the worker is subjected is quite often dependent upon the amount of ventilation available. Involved in this phase of a study are both the general

atmospheric conditions in the workroom and the capture, by exhaust ventilation, of noxious substances at the point of their origin. For such work tools and knowledge developed by the mechanical engineer are employed. This profession also contributes the means whereby heating and air conditioning are studied. From the physicist, who contributes knowledge common to all of the engineering professions, are obtained the tools and methods employed for evaluating the illumination of the workroom or the job.

It is not difficult, perhaps, for the layman to envisage the effects of chemicals and minerals upon the health of industrial workers. Such substances are responsible for a variety of ills, among which are diseases of the skin, classified as dermatoses; diseases of the lungs grouped together as the pneumoconioses, and destruction of the red blood cells, impairment of liver, brain, and functions of other vital organs which are identified as degenerative diseases. Although difficult to appraise, improper heating and ventilation of workrooms undoubtedly influence the death rates for industrial workers, which compared with those for the agricultural workers are 297.6% higher for tuberculosis of the respiratory system and 213.1% higher for pneumonia. That occupational disease hazards are associated with many occupations is evidenced by the fact that the life expectancy of the industrial worker is seven years less than that for the non-industrial worker. Improper illumination is charted in some textbooks as an occupational disease hazard, since it promotes sickness, injuries, and under some conditions may be responsible for degenerative changes in the eye.

The instruments employed by the engineer in evaluating workroom hazards are varied. For determining the concentration of dust in the atmosphere an impinger flask, small motor blower

outfit, and a microscope are the major devices used. Pitot tubes, ananometers, Kata thermometers and other instruments are employed for determining air velocities. Wet and dry bulb thermometers reveal the relative humidity of workrooms; an illuminometer measures the foot candles of light provided, and there are instruments for measuring the concentration of deadly carbon monoxide and hydrogen sulphide gases in the atmosphere. In addition, equipment common to most general chemical laboratories is essential for a complete appraisal of occupational disease hazards.

A most important function of the Division is to establish the concentration of various toxic substances to which the worker may be exposed without suffering ill effects. While various investigations have established such data for many substances, the great number of processing chemicals in use and the variety of natural products that are being handled make of this phase of the work a vast field of virgin territory. The concentration of a substance at which it becomes definitely toxic or at which it will impair the health of a worker is termed the "threshold limit." The establishment of such limits is possible only by a correlation of engineering and medical findings. For this reason, there is found in public health work no greater interdependence of medical and engineering activities than exists in a Division of Industrial Hygiene. The establishment of "threshold limits" should prove of great value to industry. Usually it is impracticable to entirely eliminate the offending substance; however, the concentration of it to which the worker is exposed can be controlled within certain limits. The establishment of "threshold limits" will serve as guides to industry in the control of occupational disease hazards.

The value of such work is apparent. Specifications for equipment to be in-

stalled for the control of such risks may be written intelligently. This alone should eliminate the purchase of systems that may prove to be inadequate to satisfactorily solve the problem at hand. In all instances where original installations must be abandoned or enlarged because of failure to measure up to requirements a waste of money is involved. In the matter of Workmen's Compensation Insurance the premium for occupational disease coverage in an industry may be lowered as a result of an investigation made to establish a "threshold limit." Of far greater importance, however, is the value accruing to the State and to industry through the conservation of the human resource.

North Carolina is rapidly being transformed from an agricultural state into an industrial commonwealth. With the change, there is ushered in new problems in public health. In order to keep pace with the changing status new activities are mandatory. As a result of the transformation, the Division of Industrial Hygiene was organized more than a year ago to cope with the new problems that have arisen for solution.

The object of the Division of Industrial Hygiene, as well as of all public health agencies, is to make it possible for everyone to get the most out of life. This thought is forcefully expressed in a bit of verse entitled "Resolve" by Charlotte Perkins Gilman, the first three lines of which read as follows:

"To keep my health!
To do my work!
To live!"

"The economic cost of the common cold is enormous. It takes more dollars and cents out of the worker's pocket in salary and out of the employer's pocket in loss of production in one year than any other sickness."

Making Women Mind-Health Conscious

By MRS. JOHN D. ROBINSON, *Wallace, N. C.*

MEMBERS of the Woman's Auxiliary to the North Carolina State Medical Society are indebted to the State Board of Health for granting us this space in THE HEALTH BULLETIN to give you a health message in which we, as a body, are greatly interested. For years the Woman's Auxiliary has felt that as an organized group it should sponsor some specific phase of educational health work that would benefit women particularly. We are told that today institutions for the mentally diseased are rapidly being filled with women suffering from conditions that could have been prevented had they known what constitutes a healthful state of mind. In view of this we have decided that our first message shall be on the subject of preventing mental and emotional disturbances among women, or, making women mind-health conscious. In choosing this subject we hasten to say that we ourselves are not capable of teaching or advising regarding this difficult phase of mental hygiene but feel perhaps that we can be of assistance to a large group of women now groping in mental darkness by passing on to them ideas and suggestions gleaned from leading psychiatrists and mental hygienists of this country.

It is predicted that the next great step in preventive medicine will have to do with the prevention, alleviation and cure of mental diseases. Many believe that medical science is now on the eve of making tremendous gains in the field of mental hygiene which will lead to increased human happiness and decreased consumption of public taxes through institutional care of mental patients. Only a few years ago no medical school taught psychiatry; now all Grade A medical schools have required courses in psychiatry and offer

studies of such problems as personality defects, the nature of adjustment failures, problems in child guidance and the mechanism of personality breakdowns. This is a forward step since the vast bulk of psychiatric treatment is done, not in state hospitals nor by privately practicing psychiatrists, but by general practitioners and family physicians. It is the latter who have frequent contact with patients having minor nervous ailments and psychologically produced aches and pains. As a group, practicing physicians are in a position to do the most good for this class of suffering humanity.

Mental ill health is certainly as common as physical ill health and probably more so. Cicero said, "The diseases of the mind are more numerous and more destructive than those of the body." He was right, but they are not always recognized as such. Medical science has always been ambitious. Its general effort has been to devise means to secure for mankind a perfectly healthful stomach, heart and all other organs. It now turns its attention to the brain and asks to discover means by which the working mind can be made perfectly healthful. The objectives of mental hygiene is successful living. This, then, is what the newest branch of medical science aims to accomplish: to produce that healthiness of mind which will enable a man to preserve his own life and to develop his best powers of mind and body.

It is heartening that public health agencies are turning their attention to this field of preventive medicine and give hope that mental diseases are soon to be better understood and means of their control brought into general practice. Definite progress has already been made. What were once thought of as incurable and hopeless mental

states are now known to be curable and preventable. Many baffling maladies that used to be thought of as having a physical basis have been found to be caused by disordered minds. In recent years treatment of the insane has undergone revolutionary changes, and the public's attitude toward persons suffering with a mental disease has made it possible for them to seek early and effective cures.

Dr. Andrew H. Wood, who is director of the Iowa State Psychopathic Hospital and who has done outstanding work in the field of mental hygiene, says that better mental health is to be achieved by the same means by which we now have better physical health, which is by discovering the cause of the trouble and then finding a way to remove it and its effects. He believes that if people know the dangers of living continuously with upset emotions, unhappy mental states and under fears and dread, they can do much to change or remove these unhealthful conditions. He names some of the more common causes of nervous breakdowns and disturbed mental states as hurt feelings, undue suspiciousness, unhappy social relations in the home or community, dread of inferiority, unwillingness to be oneself, and the arch-enemy, worry. He says that the home must be the starting place where serenity, self-reliance and sound attitudes toward life are formed; where lop-sided personalities are not allowed to start, and where wholesome physical and mental patterns of life are shaped and lived.

According to Dr. Woods, means of preventing mental ill-health and wrongly developed personalities should begin in the home and in the first years of children's lives. The attitudes toward life gained by children in their first four or five years, determine not only their future careers but also their mental excellence and their outlook on life. Good feeling and good sense, he

says, afford the most favorable environment for the growth of character and personality. Homes in which the atmosphere is marked by sincerity, affection, courage and industry are conducive to good mental traits and wholesome behavior.

When the mind is depressed or overstimulated by painful emotions, the body cannot function properly. Someone has said that such emotions as excitement, anger, fear and worry are like strong hypodermic injections of highly poisonous drugs. They have injurious effects on the body and interfere with digestion, the secretion of glands, the action of the heart, circulation, respiration and all the other functions of the body.

As a rule, you cannot medicate people into a better personality, a better frame of mind or a better adjustment. Usually something else is necessary. The use of drugs, particularly morphine and whisky, is an unsafe way of escaping reality. It leaves the person less able to face his problems than ever before.

A person suffering from neurosis must be encouraged to want to get well. Many claim that they wish to get well but balk at the first suggestion for treatment. A crippled beggar who has earned his living for 20 years by selling pencils on the street would be in a terrible plight if suddenly cured by some miracle. He would have his legs back, but he would have lost his livelihood. He really does not want to be cured. In a similar way many neurotic patients refuse to conform to treatment.

Fatigue, according to E. Stanley Abbott, has a direct bearing on one's mental health and efficiency. If conditions which cause excessive fatigue are allowed to persist, the manifest symptoms, he says, are likely to develop into some of the various mental depressions and finally in some cases into pronounced insanity of some form.

Why do people get tired, we might ask. The answer is, of course, because they do not get enough rest. And why don't they rest? Sometimes they cannot, because with small incomes and large families the work must be done and perhaps there is no one else to do it. It may be they have to support others and sudden business reverses or misfortunes have befallen them so that they need must work. But more often they only think that they cannot stop to rest. When the actual crisis comes, and they are forced to stop, they realize too late that it would have been easier and much more economical if they had stopped in time and avoided a breakdown. Often people deceive themselves, thinking that they will find a more convenient time to rest, but they rarely do; or that they can stand to work a little longer, or as they have always been well, and such a thing as a breakdown could never happen to them.

It is a good thing to work hard and systematically during regular but limited hours. It is a crime, however, against one's life—and in the case of young women, against the lives of the next generation—to work or play so as to be persistently tired. Just where the fatigue point is varies among individuals, and often in the same individual accordingly as he is well or ill fed, or well or poorly rested.

Other reasons why housekeepers do not get enough rest are that they hold to erroneous ideas. Change of occupation is thought to rest one, but in some cases it only tires the more, though the interest of it may hide fatigue.

Our ordinary recreations (they should be called diversions for they do not recreate us) are often fatiguing though the enjoyment at the time hides the fact. We are apt to attribute the fatigue we feel after the diversions wholly to the previous fatigue, when in reality, part of it is due to the diversion itself. Everything we do re-

quires energy. We use energy when we read a book or a newspaper. It requires energy to listen attentively to a lecture, to feel responsibility, to share sorrow or enjoyment.

We cannot avoid getting tired but we can avoid getting too tired. When tired, we should do less, that is, expend less energy per day. When tired, one is usually less hungry. Some think that food will not digest if one does not have an appetite for it. It may take longer, but it will digest and yield up its energy.

Another mistaken idea is that if one is wakeful one should read or take exercise in order to get tired enough to sleep. In most cases one is wakeful because of being too tired to sleep. No one can expect to benefit by adding to his fatigue. It is better to lie quietly in bed, with the eyes closed and wait for sleep to come, than to expend energy in an effort to induce sleep.

We are apt to forget that in late youth and early middle age our body and mind begin to be less quickly and completely rested, that we fatigue easier and it takes longer to be restored to normal state. Everyone should get enough rest each night to make up fully for the wear and tear of the previous day. A few rare creatures like Napoleon and Edison can keep going with 3 or 4 hours sleep out of the 24, but the vast majority of us would come to grief if we should try it. The average person needs at least 8 or 9 hours rest daily.

It has been estimated that about half the nervous breakdowns could be prevented if every one would

1. Take pains to learn what things cause fatigue.
2. Would realize that persistence in the fatiguing process may cause a breakdown.
3. Would recognize that the cure of fatigue is rest and food, not more or different activity.

4. Would think that he himself is not an exception to the rule but would apply to his own case the principles that he would apply to another.

We need also to remember that fatigue is cumulative, that it piles up, or rather that our reservoir of energy will slowly become exhausted if we do not add to daily as much as we use up. It may take months or years to reduce the store to the point of a breakdown, but on the other hand it may take years to overcome our losses, even if then.

And so as Dr. Karl A. Menninger says: "Let us define mental health as the adjustment of human beings to the world and to each other with a maximum of effectiveness and happiness. Not just efficiency, or just contentment, or the grace of obeying the rules of the game cheerfully. It is all of these together. It is the ability to maintain an even temper, an alert intelligence, socially considerate behavior, and a happy disposition. This, I think is a healthy mind."

Food Poisoning

SIGNIFICANT bacterial contamination of foods falls into two groups; contamination with specific infectious bacteria such as the typhoid bacillus, and contamination with bacteria that may bring about deleterious changes in the food itself.

The contamination of foods with bacteria derived from human and from certain animal infections, such as tuberculosis and various septic processes, is a familiar public health problem. As regards raw milk, particularly, in which the possibilities of contamination are numerous and multiplication of many bacteria can readily occur, preventive measures, public and private, have long been considered necessary. The almost universal practice in the United States of pasteurizing milk has greatly reduced the food hazards of this type. The recent indorsement by the Certified Milk Producers Association of the pasteurization of certified milk emphasizes the sanitary value of the pasteurizing process. Greater cleanliness in the preparing and serving of raw foods has likewise diminished the danger of food-borne infection.

At present the possibility of bacterial contamination of food with specific pathogens is best dealt with by

thorough cooking, by general measures of cleanliness, by careful avoidance of foods derived from sick or unsound animals, and possibly, in certain limited groups, by supervision of food handlers. Routine examination of all food handlers, although advocated by a few sanitarians, is a task of almost insuperable difficulty in the hotels and restaurants of large cities because of the frequent turnover of personnel; as regards the individual housewife or domestic servant, it is quite out of the question.

A well known instance of illness caused by swallowing harmful substances formed in foods by bacterial action is botulism. The high fatality of botulism (80 per cent or more) makes this disease justly dreaded in spite of its relative rarity. The botulism bacilli are widely distributed in soil and grow readily in a variety of foodstuffs under anaerobic conditions such as exist in foods preserved by heat and some other methods. Processes for the destruction of the bacteria of botulism were accurately worked out by commercial canning organizations in the United States about ten years ago, and their general application by the canning industry has been followed by immediate practical success.

Since 1925 there has been no instance of botulism traced to the use of food commercially canned in the United States, although there have been two recent outbreaks of botulism caused by commercially canned food imported from other countries, one from imported canned German sprats.

The chief danger from botulism in this country at present appears to lie in the use of locally grown and home canned foods. Although many attempts have been made by the United States Department of Agriculture and other agencies to foster the use of suitable home canning methods, outbreaks of botulism traceable to the use of imperfectly sterilized home canned foods continue to occur. In 1935 there were twenty-three such outbreaks with sixty-nine cases and forty-two deaths. K. F. Meyer has succinctly expressed the situation: "Until every farmer's wife has been taught that all vegetables or other nonacid foods home canned by the boiling water or oven process must be thoroughly boiled before they are served, botulism intoxication may be anticipated."

Another type of food poisoning caused by the presence in foods of the products of bacterial action has come to light in recent years. It has been established that certain common bacteria, when given an opportunity of

growing in foods under suitable conditions, generate a toxic substance that may cause violent gastro-intestinal symptoms. It has, for example, been definitely shown that staphylococci are able to produce a substance that is poisonous when swallowed by man and by the monkey. This type of food poisoning has been most commonly observed in hot weather in connection with the use of cream-filled pastries. Several outbreaks have been traced to cream pies, chocolate eclairs and similar pastries, the number of victims in a particular outbreak sometimes mounting into the hundreds. Although the symptoms produced by this toxic substance are sometimes severe, the attacks are rarely, if ever, fatal. Cleanliness of the ingredients and proper attention to the sanitation of the environment and of the personnel engaged in manufacture constitute an important safeguard against this form of food poisoning, since heavy initial seeding is doubtless one of the factors leading to abundant production of the toxic substance. Prompt and constant refrigeration is also an important aid in preventing bacterial multiplication. In some localities official restrictions have been placed on the sale of cream-filled bakery goods in hot weather.—*Journal, American Medical Association.*

Increase In Cow Population And Milk Production

*By GUY A. CARDWELL, Agricultural and Industrial Agent,
Atlantic Coast Line Railroad Company*

THE editor of THE HEALTH BULLETIN, published by the North Carolina State Board of Health, October 1936 issue, says that for several years he has been bemoaning the fact that Eastern North Carolina as a whole had not developed its dairy industry.

"As late as three years ago, on a trip of 100 miles east of Raleigh, the editor was able to see from the public highway, going and coming, only one lone milk cow, with the exception of a dairy herd near one of the larger towns."

On a recent visit which took the editor through twenty-five Eastern Counties he found a very different situation as described in the following words:

"The east has certainly aroused itself, and while there may be some places throughout the section where there is still a scarcity of cows, such places are becoming fewer and smaller. A fine illustration denoting the radical change in sentiment throughout the east may be noted in a story told the editor a few days ago.

"A State official who had visited the manager of the Caledonia Prison Farm in Halifax County informed the editor that on an official visit to that farm he was discussing with the manager the problems of milk supply, dairy regulations, etc. The prison farm manager told him that he did not want anything to happen to lessen the supply of milk. The manager said: 'We get the prisoners who are not in good health, who have bad teeth, and who are otherwise below par and do not make good road workers,' etc. He said 'I have found that by giving these men milk in abundance as soon as they arrive, that within a few weeks on such a diet, with the necessary vegetables and other accessories to the milk diet, they improve in health and weight and make good workers.' This man found out for himself what nutritionists and health officials, physicians, and agriculturalists have found for themselves and have known for a long time. It is to be hoped that the Eastern section of the State will develop its commercial dairy interest as well as provide for an abundance of dairy products for every family in the section."

County farm agents, vocational agricultural teachers, agricultural journals, and agricultural leaders in general in both of the Carolinas have featured livestock in their programs for the past several years, and their work has produced results as any observing person familiar with old conditions can

readily determine in traveling about the Carolinas.

According to the Farm Census, 1935, milk production on North Carolina farms in 1934 totaled 138,000,000 gallons, and the number of cows milked increased from 268,373 in 1929 to 352,782 in 1934.

The trip made by the editor of THE HEALTH BULLETIN one hundred miles east of Raleigh may have embraced parts of Johnston, Nash, Wilson, Edgecombe, Martin, Pitt and Beaufort Counties. It may, therefore, interest him to note that in these counties the increase in the number of cows milked in 1934 over 1929 is 70 per cent. The total number of cows milked in these counties in 1929 was 9,557 and in 1934 the total number of cows milked was 16,223. Farms reporting cows milked in 1929 numbered 6,934, and farms reporting cows milked in 1934 numbered 11,926.

There has not only been a substantial increase in the cow population, but the improvement of individual animals is most marked. In addition to the increase in dairy animals there has been a smaller increase in beef animals, and a decided improvement in hogs and poultry.

FOR THE NAMES CLUB

A friend waiting in the office of Dr. Carr, Duplin County Health Officer, the other day was handed a note as it came in to Dr. Carr from Mrs. Harvey Boney, County Welfare Officer. Here is what was in the note:

"Dear Dr. Carr:

"Mrs....., who lives in Purgatory over near Hell's Swamp is calling for a doctor for her husband."

This reminded a girl in the office that when she lived in Florida there was a firm of undertakers and embalmers on West Beaver Street in Jacksonville by the name of Geter and Baker.

Caution Against Misuse of Common Headache Remedies

By THOMAS C. WORTH, M.D.

RECENT inquiry has reached us from a large industrial organization in North Carolina requesting information and advice concerning the danger of two highly advertised headache remedies. Since they were being sold in the canteen of the mill, these industrialists had heard of the dangers of these drugs and were anxious for the safety of their employees. Such progressive and thoughtful action as this has encouraged us to re-emphasize the misuse of common headache remedies.

In the constant radio and press "bally-hoo" concerning the remarkable relief of simple inorganic aches and pains, the promoters of these drugs are always careful *not to mention* a few pertinent facts, all of you ought to know. That's the trouble with their advertising, they tell you only part-truths and withhold whatever they want to keep from you.

These headache powders contain certain of the coal-tar derivatives, whose action, in addition to allaying simple headaches, is one of depression of the heart, especially when taken in excessive doses. This action occurs directly on the heart muscle itself. In addition, some individuals, following excessive doses of these powders, have a great many of their red blood corpuscles destroyed, with the formation of a substance in their blood-stream called Methemoglobin (meth"em-o-glo'bin). This gives a blue color especially to the lips and ears, but sometimes to the entire body, a state called cyanosis.

Now, the most important point to remember is that when a person has an idiosyncrasy (id"-e-o-sin'kra-se) to one of these drugs, (which simply means he is sensitive to this drug) as small

a dose of the headache powder as will go on the tip of a knife blade will produce this blueness (cyanosis) depression of the heart, low body temperature, severe sweating, and even death. The dangers of such a drug are obvious.

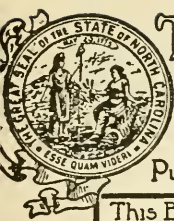
Such remedies are useful and helpful when taken under careful medical supervision, and most risky and dangerous when taken promiscuously.

Others than millworkers need protection against this nuisance, for some users of these dangerous remedies come from the wealthier and better educated classes of people. They simply need full information.

We will let the following item from the *Fayetteville Observer* illustrate our point:

"Word comes from High Point of the death of Miss..... soon after taking a remedy for a headache. This news following close on the heels of a similar occurrence in Lumberton possibly is just a coincidence, but enough of a coincidence we think to suggest the necessity of an investigation to determine if the same brand of headache remedy was used in each fatal instance."

Plans for the first National Social Hygiene Day, to be held February 3, 1937, are announced by the American Social Hygiene Association, of 50 West Fiftieth Street, New York City. On this day, state and community voluntary organizations interested in the control of syphilis and gonorrhea and other social hygiene problems, with the advice and approval of health authorities and the medical and allied professions, are planning to hold meetings all over the United States.



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— DREAMS —

By DR. MILTON J. ROSENAU

"Preventive medicine dreams of a time when there shall be enough for all, and every man shall bear his share of labor in accordance with his ability, and every man shall possess sufficient for the needs of his body and the demands of health. These things he shall have as a matter of justice and not of charity.

"Preventive medicine dreams of a time when there shall be no unnecessary suffering, and no premature deaths; when the welfare of the people shall be our highest concern; when humanity and mercy shall replace greed and selfishness; and it dreams that all these things will be accomplished through the wisdom of man.

"Preventive medicine dreams of these things, not with the hope that we, individually, may participate in them, but with the joy that we may aid in their coming, to those who shall live after us.

"When young men have vision the dreams of old men come true."

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FREE HEALTH LITERATURE

The State Board of Health publishes monthly THE HEALTH BULLETIN, which will be sent free to any citizen requesting it. The Board also has available for distribution without charge special literature on the following subjects. Ask for any in which you may be interested.

Adenoids and Tonsils	German Measles	Scarlet Fever
Cancer	Health Education	Smallpox
Constipation	Hookworm Disease	Teeth
Chickenpox	Infantile Paralysis	Tuberculosis
Diabetes	Influenza	Tuberculosis Placards
Diphtheria	Malaria	Typhoid Fever
Don't Spit Placards	Measles	Typhoid Placards
Eyes	Pellagra	Venereal Diseases
Flies	Residential Sewage	Water Supplies
Fly Placards	Disposal Plants	Whooping Cough
	Sanitary Privies	

SPECIAL LITERATURE ON MATERNITY AND INFANCY

The following special literature on the subjects listed below will be sent free to any citizen of the State on request to the State Board of Health, Raleigh, N. C.

Prenatal Care (by Mrs. Max West)	Baby's Daily Time Cards: Under 5 months;
Prenatal Letters (series of nine monthly letters)	5 to 6 months; 7, 8, and 9 months; 10
Minimum Standards of Prenatal Care	11, and 12 months; 1 year to 19 months
Breast Feeding	19 months to 2 years.
Infant Care. The Prevention of	Diet List: 9 to 12 months; 12 to 15
Infantile Diarrhea	months; 15 to 24 months; 2 to 3
Table of Heights and Weights	years; 3 to 6 years.
	Instructions for North Carolina Midwives.

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Notes and Comment

By THE EDITOR

ELSEWHERE in this issue we are publishing an article by the Editor of THE HEALTH BULLETIN, who is also Director of the Division of Maternal and Child Health Service of the State Board of Health. This article sets forth briefly a synopsis of the efforts that have been made the past year, in co-operation with the United States Children's Bureau and the different counties participating in the efforts. It will be seen by reading the article that probably greater progress has been made looking toward the establishment of permanent measures which will eventually make North Carolina as safe as any other state for mothers of the childbearing age and for infants than has been made hitherto. It will be seen that at the close of the year about 117 different localities were co-operating with this department in extending prenatal medical service to indigent women, as well as to advising on infant care. This work extended to a total of forty counties.

In addition to the article by the Editor, we are also publishing a contribution by Dr. W. Z. Bradford, an obstetrician of Charlotte. Dr. Bradford describes in detail the efforts made in the City of Charlotte during the last few years to afford not only prenatal medical service, but medical service at confinement to indigent women in the City of Charlotte and its environs. This work has been

made possible, as will be seen by reading the article, through the co-ordinating facilities of the Charlotte and Mecklenburg County Health Departments and the various civic organizations, all of which is described by Dr. Bradford. The most significant contribution which has been made to the Charlotte work has been done by the Duke Medical School. The young internes from that institution have made possible free medical service of the highest type to a large group of indigent people in Charlotte. This arrangement has filled the gap which is acutely felt in all our work in other sections of the State.

* * *

JUST before the end of the year our friend, Dr. R. L. Carlton, City Health Officer of Winston-Salem, sent the Editor a clipping from the Winston-Salem *Sentinel* with a double column headline, to wit: "No Deaths in Winston-Salem This Year From Four of Most Dreaded Diseases." This newspaper item referred to the vital statistics of the first eleven months of 1936. The fact that the City of Winston-Salem, a town of nearly 100,000 people having two widely patronized hospitals, recorded no death within its boundaries from typhoid fever, scarlet fever, whooping cough, or diphtheria is significant and encouraging.

In many sections of North Carolina during the Fall of 1936 there was an increase of diphtheria. Up to this time no plausible explanation has been forthcoming for this increase. However, the increase was a fact of discouraging consequences to many localities. Our interest here in recording the Winston-Salem record is for the purpose of expressing the opinion that this result was in no way an accident. Winston-Salem and Forsyth County have enjoyed for some years a thoroughly competent City and County Health Department, respectively. Both departments have been headed by competent physicians who are trained and conscientious health officers. Sustained efforts throughout several years have been directed toward the control of these and other communicable diseases. Despite the fact that some populous territory in nearby counties, which afford a source of constant infection and which do not yet have modern health facilities, the city was able to make a showing of this kind, is something to encourage every health officer in the State.

* * *

AS we have frequently pointed out in these columns in years gone by, this is the season of the year fraught with various dangers to old people, to people who are susceptible to so-called colds, and to very young infants. In short, it is a season of pneumonia and other respiratory diseases. There has been a large number of investigations made by scientific groups in the past few years in an effort to assemble as much information as possible on the loss of time and loss of life caused by respiratory infections. In practically every investigation the conclusions reached are the same, and that is that there is probably a greater loss of time and a larger number of deaths directly or indirectly due to respiratory infections than any other single cause.

The common cold, as every one knows, is often a forerunner of pneumonia. The fact is, all these respiratory conditions, influenza, pneumonia, bronchitis and the common cold, so-called, are frequently mixed up together in the same epidemic. No one knows how many people suffer annually from attacks of cold, how much time is lost, or how many other people are infected. It is well known that these conditions are expensive as well as dangerous. The only sound advice that we can offer here is the same old kind we have been offering for many years, and that is to any individual who has a cold that the first and most important thing to do is to go to bed, and unless the symptoms have cleared up within 24 or 48 hours to send for a qualified physician and follow his instructions from then on. Many lives would be saved and many expensive epidemics would be prevented if every person would follow this rule. It is better to lose a few days from work and upset the routine of the family and the workshop or store or factory for a short time than it is to become involved in a serious illness.

* * *

SOME time ago we noted in the official Health Bulletin of the Georgia State Board of Health an item entitled "Not All Dog Heads Show Rabies." The Georgia Board's article interested us very much. It stated that in a recent issue of an Atlanta paper there had been printed a syndicated article on rabies by Charles B. Driscoll of New York. In this article Driscoll had insinuated that all heads of all dogs sent to various state laboratories for examination in the search for evidence of rabies are always reported as positive. The Georgia health writer stated that the Driscoll statement was not true as applied to the Georgia laboratory and then proceeded to set forth

the facts, that only 47 per cent of all the dog heads examined for the year 1935 in that laboratory had been positive and an average of only about 45 per cent reported positive for a period of years. These are about the same figures that the North Carolina State Laboratory of Hygiene has been able to report for several years. The fact is that not over 45 per cent of the heads examined are reported as positive in any one year. The Driscoll statement, however, is not the first of this kind to come to our notice. There is a type of writer who is very free with information that he does not have. They write with a cocksureness about scientific matters, particularly matters affecting the medical profession and the public health, with as little regard to the truth and to the facts as it would be humanly possible to set forth. These writers generally flourish as syndicate "scientists," and also get a lot of their trash published in the so-called physical culture publications. We have had the assertion repeatedly made by such writers and picked up and reiterated by parrot-like repeaters even in this State that the State Laboratory of Hygiene is sure to make a positive report when a dog's head is sent. None of these smart alecks ever take the pains to explain that our own State Laboratory and probably all the

other laboratories in the country urge people never to kill a dog when suspected of rabies. That is the worst thing that could be done. They are advised repeatedly and everywhere to shut the dog up, place it under the observation of a competent veterinarian, when it is suspected of rabies and after it has bitten a human being or any other animal. The period of observation may not exceed over two weeks, and if the dog is still living then it need not be killed and it need not be considered as having rabies, certainly in the infectious stages. It is much easier to criticize physicians and health officers than it is to find out the facts about any given situation. If writers like Mr. Charles B. Driscoll would confine their talents when they are exercising their pens to something which they may know something about the whole country would be much better off. Mr. Driscoll, we believe, is a celebrated writer of pirate stories. We would advise him to stick to the pirate stories and let the rabies situation alone. If he knows nothing about pirates, nobody in the country knows anything to the contrary, but it is quite something else when he undertakes to discuss practices of scientifically conducted laboratories, run under the direction of competent state health departments.

Progress In Maternal and Child Health Work

By GEORGE M. COOPER, M.D., *Director, Maternal and Child Health Service*
N. C. State Board of Health

WE are presenting this summation of activities somewhat in the nature of an account of stewardship. For about twenty years the State of North Carolina has had a birth rate recorded among the three or four highest of all the states in the Union. At one time Utah, at one other time Alabama, and perhaps once or

twice South Carolina, has reported a higher birth rate. In recent years Arizona and New Mexico have led the procession. Naturally where a greater number of births according to population prevail, the hazards of infancy are greater. This is particularly so in a state such as North Carolina, having a large industrial and

tenant population, to say nothing of a population composed of between 27 per cent and 30 per cent Negroes. An industrial population, particularly in the textile industry, as well as a tenant population on the larger farms, means a shifting population, that is, a population that is on the move at least once a year. Their roots do not go down deeply in the soil on which they make their living, nor do they become well grounded in the communities in which they live as factory workers. Poverty in many cases borders on the extreme, in such a mode of life. A high mortality among infants can only be expected. The trouble in our State up to recent years has been that we have accepted it in a complacent manner and taken it as a matter of course on the assumption that nothing could be done about it. There has been a small group of people centered around the State Board of Health and among the more thoughtful citizens of the State who have not been willing to be content with such a complacent do-nothing attitude.

Along with the higher infant mortality has been the accompaniment of a higher maternal mortality than the average for the Union. Beginning about 1922, definite efforts were set in motion by the State Board of Health, aided by funds coming from the Children's Bureau at Washington under the Shepherd-Towner law appropriations. The State was divided into districts, a supervising nurse was assigned to each one, and about twenty individual county nurses were assigned to work purely with the maternal and infant health problems in the counties most needing such services. This work was continued until 1929. The funds from Washington were discontinued, the depression came on, and appropriations for the State Board of Health work reached the lowest level in 1932 and 1933 that had been touched in many years. Much of the

essential service of the State Board of Health had to be discontinued and only a skeleton organization was maintained. This situation prevailed until the meeting of the Legislature in 1935, when appropriations were increased so that some of the work could be reorganized. All through these years of depression and despondency we have kept the objectives steadily before us and have worked with every facility at hand to arouse the people throughout the State and to save the lives of these innumerable mothers and babies such as have heretofore been needlessly sacrificed.

Early in February, 1936, under the provisions of the Social Security Law enacted by Congress at Washington, funds were made available to the State Board of Health through the United States Children's Bureau, so that a comprehensive state-wide plan might be gradually set in motion. On the 4th day of April the State plan for operation under the Children's Bureau regulations, together with a submitted budget, was approved by the United States Children's Bureau, and the officials of the State Board of Health immediately inaugurated their plan of work. Naturally, many obstacles arose, but a steady effort has been made to launch the work in the places in the State where the needs seem greatest. One of the obstacles to be overcome was the lack of qualified public health nurses. Some of the difficulties will be more easily understood when it is recalled that about 68 per cent or 69 per cent of the Negro women in North Carolina are attended in child birth by midwives. About 12 per cent to 14 per cent of the white women are also attended solely by midwives at the time of child birth. This large group comprise about 25 per cent to 28 per cent of the childbearing women in the State. In some counties this problem is not acute. For instance, there are half a dozen counties

or more in the State in which the total midwife deliveries for both Negro and white women are not over 4 per cent or 5 per cent. In some of those counties, however, the infant death rate under one year of age, and particularly under one month of age, is high. In others of the counties the midwife deliveries are as high as 65 per cent and 70 per cent of the total. In nearly all such counties we have a high infant death rate. Expectant mothers in this class depend solely on the services of midwives at confinement and receive no prenatal medical care whatever. As a consequence maternal deaths from such conditions as toxemia and accidents of child birth are high, nearly all of which are preventable. Another consequence also is that the death rate from prematurely born babies, as well as the resulting accidents in birth and particularly under two weeks of age, is very high. The sponsors of the program in this State have believed that to meet the problem involved in this situation alone it would be necessary to establish prenatal medical service for every expectant mother in the State at periodic intervals of at least once a month during her expectancy period. The sponsors of the program also believe that it is necessary for the newborn baby to have competent care, medical and otherwise, for the first few weeks of its life. The chief difficulty in this program has been to get together these women, most of them from an indigent class of women, at some central place where a physician who is sympathetic and competent could be induced to devote some of his time to a careful medical examination followed with the necessary medical advice in cases needing it. About 15 per cent of the available funds has been budgeted for this purpose, to be paid exclusively to physicians. Each physician, of course, could only be paid a nominal sum, but

sufficient to compensate him for his expenses, at least, in rendering his aid.

Not having any provision for the medical treatment or hospitalization of women at confinement or of babies who need such service, the weak link in our program has been the deficiency of medical service at a time when it is needed badly. We have endeavored to supply this need by working through the local welfare departments. In some counties this has been satisfactorily done, but in many of them little has been accomplished. This is a problem that the organized medical profession and the welfare departments must work out between them. For obvious reasons, we have undertaken to restrict the clinic services to expectant mothers and mothers of young babies in families having no family physician and not being able to engage such service. We look upon the whole effort as entirely educational. We are undertaking to teach by demonstration and example. One of the hardest difficulties we have had to overcome has been to make provision for the transportation of these poor people to the centers on the days when the doctors and nurses services would be available. In the winter months rains and bad roads make it impossible for the good women who have aided in this service to drive their automobiles over the bad country roads. As one nurse put it, "You know, these women that we expect to get to the centers live on the back country roads and they are hard to reach." Another difficulty has been to overcome the reticence of the women in coming to the centers, even though the medical service is free to them. Most of them have no mode of transportation of their own, except to walk. Naturally they cannot come very far. These problems will be solved in due time. At the close of the year this division of the State Board of Health was paying for the

services of an extra nurse in each of seven counties having whole-time health departments. It was paying for half the services of such a nurse in two additional counties having whole-time health departments, and a provision was made for an additional nurse in a whole-time county as soon as a competent nurse could be secured. Special nurses were working in 15 counties having no other form of whole-time service, paid for solely by funds from the Children's Bureau. A nurse was engaged for the 16th county in this class to begin work on the first of January, and half the expenses of a nurse in two additional part-time counties were promised as soon as suitable nurses could be engaged.

At the close of the year 117 prenatal centers were established and at work. All of these centers, with the exception of two in Cumberland County, one in the City of Charlotte, seven in Robeson County, and one in Winston-Salem were organized and started work through the efforts of this division since the 4th of April. Since the first of April, services for crippled children, working with the organized co-operation of the orthopedic surgeons in some twenty of the general hospitals of North Carolina were under way, and two field nurses and a State Field Supervisor were in the field extending aid to many indigent cripples in the State, this aid to include medical and hospital service.

Following is a brief summary of some of the tangible accomplishments achieved up to the close of the year:

1. MATERNAL AND CHILD HEALTH SERVICE

Total Maternity and Infancy Centers (active)	117
Total counties represented.....	40
Children's Bureau special nurse counties having Centers.....	16
City and County Health Departments having Centers.....	23

County with special arrangements having Centers.....	1
Total visits by prenatal patients to Centers	5,880
Total infant visits to Centers....	3,677
Number of Wassermann specimens obtained in Centers.....	2,069
Number positive	260
Per cent positive.....	.12

In addition to the foregoing, a staff of eight nurses paid exclusively by the State Board of Health held midwife classes in 45 counties and personally examined and instructed about 1,500 midwives. The combined efforts of these two groups of nurses, exclusive of those working in whole-time organized counties, inspected about fifty thousand school children in the period.

2. WORK FOR CRIPPLED CHILDREN

As most of the people in the State know, the beginning of active work for crippled children in this State on an organized scale dates from the establishment of the orthopedic hospital located at Gastonia, N. C. Beginning with March, last year, when the United States Children's Bureau approved the State plan for Crippled Children Services as proposed by the N. C. State Board of Health, the work heretofore done by the orthopedic hospital and by various of the welfare offices, State and local; health departments, State and local, and by the Department of Vocational Rehabilitation in the State government, the scope of the work was extended and expanded to cover the entire State. A field supervisor and two specially trained orthopedic nurses were employed by the State Board of Health, an advisory committee of orthopedic surgeons was secured within the last quarter of the fiscal year, and work for the entire State was inaugurated.

Up to the close of the year 1936 diagnostic and treatment of a permanent nature in 17 clinics of the State had been established. Some of these

were old centers which are strengthened financially, and some of them were new enterprises. Nine of the orthopedic surgeons of the State, that is, the surgeons who confine their practice entirely to orthopedic work, have been co-operating in the examination and treatment of patients. Twenty-five general hospitals of the State had been selected, providing about 78 beds for the exclusive care of the cripples. About 9,000 crippled children defined under the plan as being cripples under twenty-one years of age had been located, and before the close of the fiscal year's work about 1,000 children will have had treatment and hospital care provided. The hospital at Gas-

tonia has an annual turnover of 450 patients. Added to this number, the beds in the general hospitals mentioned above makes it possible now to care for practically all of the cripples needing hospitalization in the State at present. The most important new feature in the work has been the follow-up system, that is, the field workers keep in contact with the patient from the time the patient is located until the medical, surgical, or public health agencies are no longer necessary to the welfare of the individual patient. At present there is no reason for any child in North Carolina to suffer for the lack of hospital and surgical care on account of an orthopedic condition.

Brief Notes On Bronchiectasis

By THOMAS C. WORTH, M.D.

JUDGING from recent inquiries, there is real need of clearer knowledge about just what is meant by bronchiectasis. A few details are given here, in the hope that patients will seek medical aid as early as possible. Before they can do this they must know the outstanding signs and symptoms, as well as understand something about the disease process itself.

Bronchiectasis (brong ke ek' tas is) means dilated or enlarged bronchi (divisions of the respiratory "tubes"); a dilatation which may vary from the slightest possible degree, producing no symptoms, to extensive dilatation in patients who produce as much as twenty ounces of exceptionally foul sputum in twenty-four hours. Bronchi may dilate in two main ways, one a saccular and the other a cylindrical form, without causing any difference in the character of the symptoms.

Causes of bronchiectasis are numerous. A rare type is found at birth. Other cases may be due, first, to direct

infection—a real inflammation or bronchitis (do not confuse with acute bronchitis) with consequent weakening of the bronchial walls, so that when any strain is imposed on them they dilate, lose their elastic properties and are unable to regain their former shape. Such stress may come from violent coughing, pressure from secretions, or pressure from surrounding lung tissue which has been damaged.

Secondly, cases may be associated with scarring (fibrosis) of lung tissue from any cause, but especially tuberculosis and pneumoconiosis (due to prolonged inhalation of irritating dusts—silicosis is an example); or may be associated with some cases of collapsed lung, due to causes not to be dealt with here.

The actual offending bacteria have not been too definitely shown. Possible ones are the influenza bacillus; a corkscrew-shaped organism with an accompanying bacillus, or other combinations of organisms.

By placing a special oil down into the bronchi and taking X-rays it is possible to detect very slight degrees of bronchiectasis. If the lower lobes or lung divisions are involved, as is most usual, there is greater tendency for accumulation of offensive sputum. Tremendous quantities may be coughed up during two or three daily "coughing spells." These coughing paroxysms are most marked early in the morning and again at night when the patient goes to bed. Blood-streaked sputum or small hemorrhages may occur. Shortness of breath is likely to be a prominent symptom after the condition has been present some time. Patients may run slight daily temperature, or lose moderate amounts of weight. However, even when there is extensive involvement, they may look and feel surprisingly well, which is in marked contrast to what occurs in tuberculosis.

When bronchiectasis has been present for a long time, patients may begin to lose weight rapidly, show evidences of heart strain, are in danger of secondary brain and lung abscesses, and are prone to develop broncho-pneumonia. One interesting and peculiar feature about this condition is the frequency with which the patient's fingers become large and bulbous—the typical "club fingers." This occurs often enough to be of value in diagnosis.

Most important to bear in mind is that while many tubercular patients have some degree of bronchiectasis, not by any means do all bronchiectatic patients have tuberculosis. This is a difficult and important differentiation. Persons who begin losing weight, running slight temperature and raising large amounts of sputum should not only have physical and X-ray examinations but should have *repeated* sputum examinations. One sputum examination, reported as negative for tuberculosis, must not be thought conclusive. Have a series of examinations made.

The outlook in severe bronchiectasis is none too encouraging. Need for reaching these cases earlier cannot be over-stressed; it is far easier to treat an early case than a late one. Surgery offers the best means of treating late cases; this consists in totally removing an entire lung division or lobe. Recent advances in surgery of the chest make this procedure relatively safe.

Drugs are disappointing, but are helpful in reducing the amount and the offensiveness of the sputum, as well as to aid in its expulsion. Placing patients so that the head is in a dependent position—postural drainage—is helpful in insuring free drainage of sputum.

Such important factors as mild climate, sufficient rest, and adequate diet are always to be regarded as essential items in treatment and are never to be neglected. Bronchiectasis, allowed to become chronic, is a discouraging problem. Its early recognition, with prevention of further damage, is by far the most logical and effective mode of attack.

The Soul of Beauty

There are millions of people, chiefly women, who seek to make themselves beautiful by the aid of paints and cosmetics, lipsticks and decorative gewgaws of various sorts. They need to be taught that beauty is something which is more than skin deep. It is something which must come from within, and can only be crudely imitated by such camouflages as rouge and face powders. Real beauty is not merely a physical quality: it is an expression of character. A beautiful face is an incarnated expression of rectitude of conduct and loftiness of character, if not in the immediate possessor, in some near or remote ancestor. Somewhere in the individual's pedigree, there has been a beautiful life. One of the world's greatest needs is an aristocracy of health, beauty and character.—*Good Health*.

Maternal and Child Health Work In Charlotte, N. C.

By W. Z. BRADFORD, M.D.

THE increasing interest of the American public in the problem of maternal and infant welfare is the result of an extensive campaign of lay education. Following the report of the White House Conference in 1930 the unnecessary dangers and the tragic mortality rates of childbirth in this country became a matter of common information. Since that time the campaign of public education to arouse the public conscience to demand greater protection for the childbearing women of America has steadily gone forward. This movement has taken on momentum through the medium of articles and editorials in magazines with a wide circulation among women, through various civic clubs (in our own community the Kiwanis Club), through various State, county and city health offices, through the American Legion, and through the General Federation of Women's Clubs, which has taken a most active part in efforts to improve the maternal mortality rates. These are only a few public organizations active in this movement.

At the same time the American Committee on Maternal Welfare, acting in an advisory capacity with the Children's Bureau of the U. S. Department of Labor, is conducting an active campaign through the medical profession. The official purpose of this committee as stated in its by-laws (in part) is as follows: "The object for which this corporation is formed is to awaken and stimulate the interest of members of the medical profession in co-operating with public and private agencies for the protection of the health of mothers and their offspring before and during pregnancy and labor, and after confinement, to the end that

the conditions which menace or interfere with the health and life of the mother and infant may be improved or prevented, health promoted and life saved." This committee has attempted to stimulate community efforts toward the development of their own resources for adequate maternity and infant care.

The basic fact of the preventability of the overwhelming majority of maternal deaths and the possible reduction in infant mortality is especially a challenge to us when we realize that our Southern states have the highest death rate of any in the Union. That this rate can be reduced has been proven. Such is accomplished by awakening the public conscience as to their responsibility to those unable to afford competent medical facilities and by stimulating the demand for improved hospital and medical services for the childbearing women of the community.

It is my pleasure to briefly call to your attention the efforts that have been made in Charlotte to improve the facilities for the care of mothers and new-born infants. First, I would mention the hospitals in the city of Charlotte. The hospitals of our community have universally enlarged and developed their equipment for the handling of the maternity patient. This has been done according to standards recommended by the American Hospital Association and the American College of Surgeons. Among these are isolated delivery pavilions, special floors or wings for the newly-born infant and mother where they are removed from the cross-currents of infection present in the general hospitals, also segregated nurseries, modern in-

cubators for care of the premature, improved anaesthesia facilities, etc. As a result the combined maternal mortality of three local institutions over a three-year period was found to be only 3 per 1,000. This is less than one-half the average mortality rate in the State of North Carolina, and when the large number of complicated patients handled in these hospitals from other communities is considered the high degree of service rendered becomes apparent. This is especially of note when the increasing number of white patients delivered in hospitals in the city of Charlotte is considered. In 1932 fifty-five per cent, in 1933 fifty-seven per cent, in 1934 sixty-three per cent, and in 1935 seventy-two per cent of the white infants born in this city were hospital births. This is remarkable in a State where only 8 per cent of the total births are hospital-born. The local hospitals are equipped and staffed to handle these patients with a minimum of danger and a maximum of security and comfort.

Secondly, the problem of the indigent. It is estimated that there are at the present time approximately 1,000 annual births in Charlotte and Mecklenburg County in families with incomes insufficient to afford private medical services. The local Kiwanis Club has for a number of years maintained an active and vital interest in maternal welfare. Through their support a maternity clinic for charity patients has been developed which now handles over 750 annual births in this community. Since its inception in July, 1933, this clinic has delivered over 2,500 infants in Charlotte and Mecklenburg County. This clinic is quite similar in its organization and its service to the Maternity Center Association in New York City. These patients are unable to afford the services of any physician and are given thorough prenatal, delivery and postnatal care. The combined efforts of

numerous individuals and organizations render this work possible, among them being the local city and county health department, the Charlotte Kiwanis Club, Duke University, the North Carolina State Board of Health, the United States Government through recently enacted social security legislation, the Good Fellows Club, the Charlotte Co-operative Nursing Association, the Family Service Bureau, the Salvation Army, the American Red Cross, and a number of members of the local medical society. Out of this combined effort a service has been evolved resulting in a steady reduction of maternal and infant deaths in this city and county. (Where three years ago only 40 to 50 per cent of these patients consulted the clinic prior to delivery, today 90 per cent are given attention early in their pregnancy.) This has been made possible by education of this group of our populace as to the importance of proper maternal care, both for their own health and the preservation of the life of their new-born infant.

This organization has resulted in a tremendous savings to the city and county not only in actual lives but in dollars and cents. The burden of hospitalization of the charity obstetrical patient has been reduced. Through the intensive treatment of social diseases present in over 20 per cent of these patients, many new-born infants are spared the ravages of congenital disease. This is bound to result in a reduction of penal and institutional care as these children grow to adolescence and adult life. "The value of an individual to the State is more often than not dependent upon the manner and the nature of its birth."—Dr. Chipmann, Montreal.

The most recent extension of the scope of this maternal welfare program in Mecklenburg County has been the recent action of the board of

county commissioners who at the request of Dr. E. K. Hand, county health officer, have appropriated funds for the development of prenatal clinics for charity patients in isolated sections of the county. These clinics are held in Huntersville, Pineville, and Steele Creek on consecutive Wednesdays at 1 p. m. By this means the indigent in the rural regions will be able to obtain medical services early in their confinement, and it is hoped that the maternal and infant mortality rates in the county will show the same improvement that has been obtained in the city of Charlotte.

If you reduce the activities of the stork in Mecklenburg County to statistics you will find that in 1935 approximately 25 per cent and in 1936 approximately 33 per cent of the babies born were ushered into the world by Duke Hospital interns under the supervision of the Kiwanis Club Charity Maternity Clinic. During the calendar year of 1935 this clinic delivered 552 Charlotte and Mecklenburg County babies. This figure will approach 750 births in 1936. This clinic was given the highest rating of any activity of the City-County Health Department in a recent appraisal of local health activities made by the U. S. Public Health Service.

The mortality rate in this clinic is far less than that of all births in the city of Charlotte, and it is one-third the average mortality rate in the State of North Carolina. The infant mortality rate of approximately 3 per cent is remarkable in contrast to the rate in the best of society. In the public that this clinic serves the incidence of social diseases, tuberculosis, high blood pressure and kidney disease, pellagra, and other deficiency diseases that increases the danger of childbirth to both mother and infant is much higher than in the remainder of society. When the unfortunate environmental

surroundings of this group is considered, the poverty and social background, the possibilities of this type of maternal care when applied universally over North Carolina and our other Southern states becomes evident. Such is the purpose of the maternal welfare program of the Social Security Act. This clinic has recently obtained \$1,800.00 yearly through the Social Security Act.* The Kiwanis Club of Charlotte gave the first financial support that made the organization of this clinic possible. At the present time the Kiwanis Club funds are used for records, certain instruments, emergency medication, ambulance transportation, X-rays, blood transfusions, and accessory aid of an emergency nature. An infancy clinic has recently been established for further care of babies delivered by this service, especially for the further treatment of those born under the handicap of congenital social disease.

Over 95 per cent of these births occur in homes. Only complicated cases are hospitalized. Thus the births in hovels, in tenements, and slums and in single-room shanties on the banks of the Catawba, where sanitary conditions range from poor to terrible, where running water may exist only when it rains, where the first light to fall on a new life may be from a kerosene wick or a flashlight tucked under the arm of a young interne and where the new-born's first bed may be covered with old newspapers instead of soft sheets, life is brought into the world with a high degree of safety and efficiency. Eight subsequent visits are made to these homes by visiting nurses, laboring under the wing of the Good Fellows Club through the Charlotte Co-operative Nursing Association.

*Awarded through the Department of Maternal and Child Health Service of the North Carolina State Board of Health.

Three subsequent visits are made by the physician. Last year student physicians made 3,500 visits to see patients. There were 3,217 other visits to the clinic by expectant mothers.

In conclusion let me add that during the past few years a number of extensive studies on maternity care have been made, chief of these being the investigations of the Children's Bureau of the U. S. Department of Labor, the Commonwealth Fund, and the Maternity Center Association of New York City. Because of the vast scope of these studies the basic findings are not limited to any one locality nor to any one group of people. It was found in general that maternal and infant mortality rate is due to the fact that many mothers have care which is inadequate to make maternity safe.

Ignorance was found as one of the chief causes of the inadequate care. Ignorance on the part of the expectant mothers and their families kept some from seeking good care when it was available. This ignorance and apathy of the individual and family is reflected in the lack of public interest and public provision for good maternity care. The city of Charlotte and Mecklenburg County are exceptions to this finding, for through the medium of this organization even the more unfortunate women in this community have been taught the need of medical advice early in pregnancy. As a result the vital statistics of 1937 concerned with maternity and infancy welfare are those which the citizens of Charlotte and especially the Kiwanis Club may well be proud.

Endemic Typhus In North Carolina— Believed To Be Transmitted By Rat Flea

By MRS. J. HENRY HIGHSMITH, State Board of Health

THE appearance of thirty or more cases of typhus fever in North Carolina during 1936, resulting in three deaths, is cause for no great alarm; however, the severity and fatality of the disease are serious enough to warrant every precaution being made to prevent its spread. Especially is this true now since the question as to how this disease is carried from man to man, long a controversial matter, is believed to have been settled.

Typhus fever is associated in the minds of most Americans with the World War, armies, camps, and trenches. The body louse or "cootie," as the doughboys called it, was known to be the carrier. But the typhus that is found in North Carolina and other Southern states today is not the epidemic form which was so prevalent during the World War and which is

still more or less common in many countries of Europe and other parts of the world. Neither is it the type that is associated with slums, filth, and squalor. It is a more benign type, less severe in its reactions and having a low fatality rate. The rate is usually about 5 per cent or one death in twenty cases. However, the fatality varies with age—less than 2 per cent under 45 years and about 30 per cent above 65 years. This disease found in many of the southeastern states is believed to have come from Mexico. In many respects it resembles "Tabardillo," the Mexican form of typhus.

Both the epidemic and endemic forms of typhus are said to be caused by the same germ, the only difference being a new host and a new means of transportation for the endemic type. It is well known that the epidemic

typhus is borne from man to man by the body louse, and it is reasonably certain that the endemic type is borne from rat to man by the rat flea. The epidemic typhus is more deadly, shows a decided preference for cities, especially crowded slums, and prevails during the winter and spring. It is highly communicable. Endemic typhus shows a preference for rural communities and has its maximum incidence during the summer and fall. It does not spread as rapidly as the epidemic type and is less fatal.

In both forms, the disease is marked by a sudden onset with headache, dizziness, and a fever lasting usually about two weeks. There is always a rash, a most characteristic symptom, which appears about the fifth day and lasts from two to ten days.

According to the July-September report of the Health Section of the League of Nations, there are four types of typhus-like diseases in the United States, these not including the louse borne type. The endemic benign form known as Brill's Disease is one of the group, but it is not to be confused with the type found in the South. In recent years numerous studies have been made of this newer type of typhus fever in order to find its host and means of transmission. Kenneth F. Maxcy, past Assistant Surgeon of the United States Public Health Service, was the first to point out that all evidence was against louse transmission and to suggest that the reservoir might be the rat. This assumption was later verified by his co-workers, Dyer, Badger, Ceder, Rumreich, Workman, and Kemp. These workers are now agreed that the disease actually has its reservoir in rats and that it is transmitted from rat to rat and occasionally from rat to man by rat fleas.

The question then is, will endemic typhus, which is flea borne from rats to man, become in the future as wide-

spread and devastating as epidemic typhus, louse borne from man to man, has been in the past? The answer to this question, it stands to reason, will depend on the control or lack of control of rats. To eradicate endemic typhus it will be necessary to eradicate rats.

A distressing note concerning typhus fever in the South is that it is on the increase. "Birmingham's Health," a bulletin published monthly by the Jefferson County Board of Health of Alabama, reports that the disease began to appear in South Alabama about 1921, and since that time there have been no less than 2,500 cases of the disease and 102 deaths. The Bulletin says:

"The highest incidence was in 1933 when 823 cases were reported. In the first nine months of 1936 266 cases were reported of which eight occurred in Jefferson County. Thus the disease is apparently on the increase in this territory. While the majority of Alabama cases have been in rural areas, association with food handling establishments constitutes an important factor in urban cases.

"Negroes are relatively free from the infection, the attack rate being approximately one-tenth of that of the white population. Adults are more often attacked.

"The disquieting fact must be faced: typhus has secured a dangerous foothold in certain sections of this State and each year is spreading northward in increasing incidence. A broad program for the control and eradication of rats is, therefore, an immediate public health necessity."

The League of Nations Journal recently issued is also of the opinion that endemic typhus is on the increase in the United States. It says:

"It seems that murine typhus (rat borne) in man has been increasingly frequent in the United States. In Ala-

bama, for instance, some 60 to 80 cases per year have been reported since Maxcy and Havens discovered it in 1922 through the Weil-Felix reaction. It was limited to the cities of the south and southeastern part of the State. In 1932 the number of cases rose to 237 (11 deaths) and in 1933 to 823 (35 deaths). The disease had spread to strictly rural areas without modifying either its mode of spread or its fatality (Baker, McAlpine & Gill, 1935). In Texas, 417 cases were reported in 1934 against 5 in 1922 (Bohls, 1935). A check in the increase was, however, obtained as a result of extensive rat-destruction campaigns in Texas, Alabama and Georgia."

POISON AND EXPLOSIONS CAUSE MANY HOUSEHOLD ACCIDENTS

Carbon monoxide poisoning, defective electrical cords, explosions from cleaning fluids and medicinal poisoning from administration of the wrong medicine on the cabinet shelf—all contribute to the high accident toll found in the home, according to Dr. Louis L. Lefkowitz who writes of these in the December *Hygeia*.

Carbon monoxide poisoning, which results from the use of illuminating gas, may be guarded against if the following points will be observed: 1. Investigate every odor of gas immediately. 2. Keep all rooms containing gas fixtures well ventilated at all times, assuring a good supply of fresh air. 3. Exercise close supervision of cooking food so that it will not boil over and extinguish flame, allowing free gas to escape. 4. Make certain that the pilot light is lit or the gas supply shut off. 5. Where gas heaters are used see that all connections and pipes are tight. 6. Before retiring shut off all gas jets and open the windows.

MILK

1. For good health, milk should be included in the diet of every man, woman and child. Of all foods, milk is the outstanding and, in fact, the most important single food known.

2. Milk improves health. It brings to our bodies all of the important things we need for energy and growth, and when used with vitamin D, found in sunshine, cod liver oil or viosterol, helps to make good bones and good teeth. Milk is our best source of calcium, so necessary for teeth and bones.

3. Milk should not be limited to infants, who thrive on it. It is also an essential food for the growing child. It is an essential food for adults, too. It is imperative that pregnant and nursing mothers have milk if babies are to develop and thrive as they should.

4. The recommendation of nutrition and health authorities that more milk be used should be given serious consideration by all parents. If this advice is followed, growing children will receive the amount of milk necessary for good health and strong bodies.

5. All children should have a quart of milk every day, and adults at least one pint. Use milk freely—as a drink, hot or cold, plain or flavored; with puddings, cereals, cream soups; or as ice cream.

6. Compared with other foods of similar values, milk is the cheapest; never "stint" with milk.

7. Remember:

Your child needs milk for his health and growth.

You need it to keep your health.

Don't deprive yourself and your family of the most nearly perfect food.

There is no substitute for milk!—*Agricultural Review*.



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MARCH, 1937

No. 3

E. R. HARDIN, M.D., LUMBERTON, N. C.



For the Past Sixteen Years Health Officer of Robeson County

Above is a photograph of Dr. Hardin, who recently began his seventeenth year as full time health officer of Robeson County. He enjoys the distinction of probably being the only health officer in North Carolina to have the question of continuance of his department work submitted to a vote of the people. A few years ago a Robeson legislator put such an act through the Legislature. The election resulted in an eight to one popular vote in favor of Dr. Hardin and his department work.

He has rendered a valuable service to the people of Robeson County, particularly in his work for mothers and babies among the poor.

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FREE HEALTH LITERATURE

The State Board of Health publishes monthly THE HEALTH BULLETIN, which will be sent free to any citizen requesting it. The Board also has available for distribution without charge special literature on the following subjects. Ask for any in which you may be interested.

Adenoids and Tonsils	German Measles	Scarlet Fever
Cancer	Health Education	Smallpox
Constipation	Hookworm Disease	Teeth
Chickenpox	Infantile Paralysis	Tuberculosis
Diabetes	Influenza	Tuberculosis Placards
Diphtheria	Malaria	Typhoid Fever
Don't Spit Placards	Measles	Typhoid Placards
Eyes	Pellagra	Veneral Diseases
Flies	Residential Sewage	Water Supplies
Fly Placards	Disposal Plants	Whooping Cough
	Sanitary Privies	

SPECIAL LITERATURE ON MATERNITY AND INFANCY

The following special literature on the subjects listed below will be sent free to any citizen of the State on request to the State Board of Health, Raleigh, N. C.

Prenatal Care (by Mrs. Max West)	Baby's Daily Time Cards: Under 5 months;
Prenatal Letters (series of nine monthly letters)	5 to 6 months; 7, 8, and 9 months; 10
Minimum Standards of Prenatal Care	11, and 12 months; 1 year to 19 months
Breast Feeding	19 months to 2 years.
Infant Care. The Prevention of	Diet List: 9 to 12 months; 12 to 15
Infantile Diarrhea	months; 15 to 24 months; 2 to 3
Table of Heights and Weights	years; 3 to 6 years.
	Instructions for North Carolina Midwives.

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Notes and Comment

By THE EDITOR

MARCH is the month of the year when the lengthening days and the increased hours of sunshine make outdoor life more pleasant and therefore begin to dispell the colds and sniffles of winter. It begins to bring the color back to the babies' cheeks and relieves the mothers of much nervous strain in caring for their little ones kept inside the house for so many weeks.

There is one aspect, however, that such change in conditions and living habits bring about which is not so pleasant, but is disturbing. It is the traditional habit, more a habit of mind, of dosing the entire family with laxatives and purgatives and what-nots. It is the golden period for the sellers of so-called "tonics" and "rejuvenators" and "blood builders," etc. In the old days, the molasses and sulphur habit followed by the very pleasant custom of several weeks indulgence in sassafras tea was not nearly so bad as the present methods of depending on the various "patent" medicines advertised so promiscuously in almost every newspaper and over nearly all the radio stations.

The matter of regulating one's way of living, that is, the personal hygiene we might call it, is a matter for each individual to decide for himself. Every one should partake of some essential foods known as protective

foods in the diet daily. Such foods comprise vegetables, fruits, some meats, and plenty of milk and dairy products. The foregoing are known as protective foods, and some of them are essential for good health for everybody.

The vitamin racket as practiced today is probably one of the worst in the realm of food which the country has ever experienced. Knowledge of foods has been wonderfully increased by the discovery and scientific study of vitamins, but the trouble is half truths have been seized upon by commercial interests and the people are being exploited world without end. They are being urged to spend their money for this, that, and the other as containing the necessary vitamins, without which the prospective patron would immediately die, and one of the troubles is that people are urged that such essential elements in the food or medicine could nowhere else be obtained except in this particular product right then being advertised. The old custom still stands as the best possible advice for people to follow, and that is a balanced diet comprising some of the essential foods in every day's diet.

The question of self-medication has become one of the most serious that people have to contend with, owing to the intensive advertising carried on today by a few unscrupulous dealers in remedies which are far from safe.

In this connection, we want to call attention to an article in this issue by Dr. S. V. Lewis, Assistant Health Officer of the Orange-Person District Health Department at Roxboro. The title of the article is "Facts Concerning Self-Medication." The reader will find Dr. Lewis' article very interesting. Dr. Lewis very properly emphasizes the most essential requirement which must be established before any medication of any kind is taken by any human being, and that is a diagnosis must be made first. This is one of the hardest things that a physician has to do. It is certainly more reasonable to believe that a physician who has had long years of experience in study and treatment of disease is more capable of making a diagnosis than one who has never given the matter a thought except when he might have an ache or pain. The Sairey Gamps and the fishwives have been with the world since time immemorial. The radio announcers with a pleasant voice who daily send out over the air accounts of the wonders of certain medicines and the cocksure newspaper advertisers who daily publish the so-called virtues of the various remedies advertised to satisfy the desires for self-medication are nothing more nor less than polished, educated Sairey Gamps and fishwives. There is one vital difference, however, and that is that the Sairey Gamps and the fishwives of tradition have always given their advice free and without price, and with no other motive than that they just simply love to tell other folks what to do and to pose as the possessors of wisdom the average human does not have, but the Sairey Gamps and the fishwives of today in their advertisements over the radio and in the newspapers are carrying on the fishwives' traditions for the money there is in it.

Once again we offer the free advice here that when medication of any kind is needed, the best policy to pursue is to let a competent physician prescribe what is to be taken.

* * *

THE newspapers some weeks ago carried a most gratifying item sent out from Detroit, Michigan. We refer to the dispatches describing the roundup by Federal police agents of a group of ten or twelve eye "doctor" fakers who have been operating for many years all over the country. We have been mentioning from time to time in these columns the activities of these fakers in North Carolina. We have urged people everywhere to refuse to have dealings of any kind with these traveling frauds and robbers. Notwithstanding all our urgent warnings and warnings of many other people in the State by newspaper publicity during the last fifteen years, we feel sure that these fakers have defrauded people in North Carolina of hundreds of thousands of dollars of hard-earned money. The newspapers did not follow through with the outcome of the trial. As Michigan does not have a capital offense law and therefore they cannot be hung in that state, the best that we hope for is a life imprisonment. That would be getting off entirely too easy, but it is the best that could be expected. In any event, we hope they have them all.

It will be remembered that some years ago two of the most active were arrested by a deputy sheriff up in Forsyth County. They were released on a \$2,000 bond, which they promptly forfeited and were never heard of again. We fear, however, that the racket was so successful and so productive of big money that the Federal agents have not rounded them all up. It would, therefore, be wise for our readers to decline to do business with

any kind of an agent who comes to one's home with the proposition to talk about eye diseases or to sell medicines of any kind. We still insist that if at any time in the future one of these traveling eyeglass fakers comes to one's home, the best plan to follow would be to detain them long enough for the police or the sheriff to be called and have an arrest made at once.

* * *

FOR several years pediatricians have insisted that a daily ration of cod liver oil should be given to every newborn baby until it is about eighteen months of age. This should be given every day as a precaution against the nutritional disturbances which would eventually have such disastrous results on the babies' teeth formation and the bony system of the body. Such deficiencies frequently are evidenced in such diseases as rickets.

The nurses working for the State

Board of Health have always been urged to advise the parents of babies to carry out this policy, especially in cases where the babies show evidence of nutritional deficiencies. One of our nurses recently reported that some manufacturing concern selling cod liver oil had given her a large supply to give out as samples. A druggist friend of hers divided the samples in 2-ounce bottles and she presented it to some mothers of babies who were specially in need of this vital element in their diet with such satisfactory results that the druggist reported later a very large return of the sample bottles for more of the stuff to be purchased direct. They were convinced of the improvement in the babies' condition in a short time.

We call attention to this in the hope that the habit will be more generally followed in remote sections where the babies so urgently need such care.

Prenatal Clinics In Raleigh

In our February issue we published an article by Dr. W. Z. Bradford of Charlotte, the title of which was "Maternal and Child Health Work in Charlotte, N. C." On reading this article a group of physicians here in Raleigh who have been doing considerable work along the same lines described by Dr. Bradford were very much interested in the Bradford article, and all of us feel that our readers will be much interested in knowing of the progress being made along this line by this group of Raleigh physicians. We requested Dr. Verne S. Caviness of Raleigh, who was familiar with the work, to write a brief description of what has been done here. This article by Dr. Caviness will be found in this issue.

Just a few years ago about one-third of the deliveries of babies in the city of Raleigh were by midwives.

Of course the majority of them were Negroes, but there were many white women dependent on midwives. Everybody will be interested in the statement Dr. Caviness makes that no white woman in Raleigh has been attended by a midwife in more than a year. Another rather amazing statement is that in the eight years that this work has been under way there has not been a death of any mother who regularly visited the prenatal clinics. It must be understood, of course, that these clinics are strictly for indigent women.

The description of the work here, following the article describing the work in Charlotte, is evidence of progress now being made in various parts of the State which will eventually lead to a material reduction in the maternal and infant death rate in North Carolina.

NORTH CAROLINA BUREAU OF VITAL STATISTICS PROVISIONAL REPORT FOR 1936

		1935		No.	Rate	No.	Rate
Total number deaths....	35,834	33,451	Malaria	150	4.3	94	2.8
Death rate	10.4	9.8	Cancer, all forms	1789	51.7	1780	52.1
Total number births....	76,869	79,596	Diabetes mellitus	400	11.6	375	11.0
Birth rate	22.2	23.3	Pellagra	849	10.1	891	11.4
Infant deaths (under			Pneumonia, all forms.....	3480	100.3	2828	82.8
one year)	5,184	5,407	Diarrhea and enteritis				
*Infant mortality rate	67.4	67.9	(under 2 years).....	812	23.5	852	24.9
Maternal deaths	499	554	Appendicitis	318	9.2	327	9.6
*Maternal mortality rate	6.5	7.0	*Puerperal septicemia..	115	6.5	136	7.0
			*Puerperal, other forms	384		418	
			Suicide	282	8.2	276	8.1
			Homicide	364	10.5	399	11.7
	No.	Rate	No.	Rate			
Typhoid and para-							
typhoid fever	76	2.2	83	2.4			
Endemic typhus fever	3	0.09	1	0.03			
Undulant fever	3	0.09	0				
Smallpox	0		0				
Measles	9	0.3	69	2.0			
Scarlet fever	25	0.7	22	0.6			
Whooping cough	35	1.0	308	9.0			
Diphtheria	190	5.5	168	4.9			
Influenza	1114	32.2	1038	30.2			
Acute poliomyelitis							
and polioencephalitis	12	0.3	72	2.1			
Epidemic cerebrospinal							
meningitis	54	1.6	38	1.1			
Rabies	5	0.1	6	0.2			
Tetanus	29	0.8	24	0.7			
Tuberculosis, pulmo-							
nary	1896	54.8	1761	51.5			
Tuberculosis, other							
forms	200	5.8	175	5.1			
Syphilis, locomotor							
ataxia, paresis	405	11.7	403	11.8			

PREVENTABLE ACCIDENTS

Automobile accidents,				
primary	920	26.6	1022	29.9
Automobile and rail-				
road collisions	33	1.0	36	1.1
Other railroad acci-				
dents	109	3.2	106	8.1
Air transportation				
accidents	5	0.1	5	0.1
Accidental drowning...	211	6.1	143	4.2
Conflagration and ac-				
cidental burns	173	5.0	239	7.0
Accidental traumatism				
by firearms	94	2.8	97	2.8

1936 figures provisional.

* Infant and maternal rates (per 1,000 live births).

Facts Concerning Self-Medication

By S. V. LEWIS, M.D., Assistant Health Officer, Orange-Person District Health Department, Roxboro, N. C.

SOME two or three years ago the Reader's Digest carried a short article headed "Choose Your Own Poison." It dealt with facts concerning self-medication, and the dangerous results which so frequently follow such practices. It seems a bit inconsistent that the average citizen, conservative in most things, falls for high-pressure advertising and makes a test tube out of his stomach by gulping down the different concoctions advertised to accomplish almost everything from turning ingrowing nails outward to growing hair on a slick, shiny dome.

The primary folly of self-medication lies in the inability of the ordinary individual to diagnose his own ailments, and the first essential of any competent treatment is an accurate diagnosis. It has been well said that

"He who treats himself has a fool for a doctor." Certainly he who treats himself usually treats symptoms rather than the underlying disease, and it is to this characteristic that the manufacturers of patent medicines and nostrums appeal. These symptoms may be the early warning of conditions which will become serious if not recognized and properly treated.

No one is to be depended upon for the diagnosis of diseases except a physician, and at times it is not without great difficulty that he is able to arrive at the correct diagnosis. No physician will prescribe for a patient without some knowledge of what disease or condition he is treating. Certain drugs have specific actions on body tissues, therefore the physician first determines the disease to be

treated, and then is able to prescribe such drugs as may produce the desired results; otherwise, if drugs are administered, they may produce undesired or even dangerous results.

The pure food and drug act prohibits the sale of preparations advertised to cure tuberculosis, cancer, and other malignant diseases. All preparations must contain ingredients as advertised on the package, but the medicine manufacturer is not required to label his concoctions unless they contain poisonous drugs such as acetanilid, strychnine and some others, and only rarely does the purchaser realize the significance of such drugs as are mentioned on the label and their dangerous character. Since so many highly advertised patent remedies contain poisonous drugs, the only safe policy is to secure a physician's advice regarding a preparation before inflicting it on the system.

A close observation of advertising propaganda will reveal that the various remedies flaunted before us from magazines, newspapers or billboards, and over the radio are usually not advertised as cures for diseases, but as relief for certain symptoms. However, the advertisements are frequently so cleverly worded that the very decided suggestion is received that they are cures.

I do not deny that some of the preparations used in self-medication could be of some benefit if we knew two very important facts. First, if we

knew what disease or condition was present. Second, if we knew what drugs or substances were in the preparation, something that is not usually known unless the preparation contains some of the poisonous drugs that must be labeled in order to comply with the law. Thus, self-medication with patent medicines is really the treatment of a condition whose nature is not known with a remedy regarding the real effects and dangers of which we are totally ignorant. Hardly a very intelligent procedure, is it?

When advised to take this or that for acid indigestion, why and how do we know our symptoms are not due to stomach ulcers or cancer of the stomach? It is not justice to ourselves to take some preparation advertised to establish the alkaline balance, when there may be some malignant disease causing the disturbance, if indeed our trouble is in any way connected with the alkaline balance. Remedies containing poisonous drugs are advertised for the relief of inorganic pains, but the advertisements do not tell that death may occur if the remedy is taken by one having an organic heart disease.

The most of us may not be expected to look for the things omitted in medicine advertising, but for the safety of ourselves and our families, we can refrain from self-medication and go to a physician with our ills. He is the only one competent to diagnose and treat them.

Vital Statistics Records

IN this issue we are publishing two sets of vital statistics figures which should be interesting to all our readers. The first item we will mention is a comparison between the records for 1935 and those for 1936. These tables will be found elsewhere

in this issue. In one of the tables we are presenting such information as the total number of deaths and births occurring in the State in 1935 and 1936. The 1935 figures are final, that is, they are what we call adjusted figures. The items for 1936 are what

is called provisional, that is, they will be subject to slight changes later on.

It will be noted that the birth rate was approximately one point lower in 1936 than it was the previous year, there being nearly 3,000 fewer births last year than there were the year before. It will be noted also that the number of deaths of infants under one year of age last year was fewer, but there was not a sufficient decrease to materially change the rate, although it was reduced half a point.

The maternal mortality was a little lower last year than the previous year. It is gratifying to point out that typhoid fever continued its steady decline, reaching the lowest rate in the history of the State. The rate on diphtheria, however, was increased. Deaths from influenza in each of the two years ran considerably over 1,000, the rate being higher last year than the year before. The deaths from infantile paralysis reached almost to a subnormal level, which was quite a contrast to the rate of the preceding year.

One of the most disturbing aspects in this report is that there were eleven deaths in the two years from rabies, six in 1935 and five last year. All these deaths were diagnosed as hydrophobia beyond any question of doubt. All of them were tragic, and the descriptions in the Leaksville and Reidsville papers of one of these deaths which occurred in Rockingham County were classics. These newspapers described the death in that county as being terrifying in every particular. There is no excuse for any human being in this State to die from rabies, as a few simple restrictions of state-wide character could be enforced in the control of dogs. All of us note every day in our journeys here and there flocks of dogs, large

and small, vicious and otherwise, roaming at large on the streets and in the roads, mingling with children, none of them muzzled or under control of their masters. It is a disgraceful situation.

It will be noted that there was a slight increase in the number and rate in deaths from tuberculosis. Deaths from syphilis remained about the same. Malaria caused 150 deaths last year as compared to 94 the preceding year. There was a reduction in the deaths from pellagra, although 349 people died last year from that disease. Pneumonia again led the procession as the single cause of the greatest number of deaths. The rate in that disease increased by nearly 20 per cent over the preceding year. There was a slight increase in deaths from suicide, but a decrease in homicides. The rate in deaths from appendicitis remained almost stationary, there being a slight reduction.

For several years we have been publishing in our July or August issues tables showing the number and rate in deaths of infants under one year of age and of maternal deaths in this State by counties and in some twenty of the largest towns, and also the same figures for all the various states in the Union for the preceding year. This could not be done last year, because for the first time we have failed to obtain the statistics of the other states from the United States Bureau of the Census for 1935. Even at this time we have only been able to secure the figures for about fifteen states. We regret this omission very much, but owing to a change in policy of the United States Bureau of the Census in discontinuing the issuance of provisional statistics, we have been unable to secure them. We regret very much this change in policy on the

part of the officials of the United States Bureau of the Census, but there is nothing that we can do about it.

The table for comparisons by counties of this State will be found in

this issue. We have held these back for several months hoping to procure the census reports from all the other states, in order to publish all of it in the same issue.

Results Obtained In Prenatal Clinics At Rex Hospital And St. Agnes Hospital In Raleigh

By VERNE S. CAVINESS, M.D.

IN the summer of 1929 Dr. A. S. Oliver, of the Departments of Obstetrics in Rex Hospital and in St. Agnes Hospital, in Raleigh, established prenatal clinics in the outpatient departments of these two hospitals. These two clinics have received his personal supervision ever since they were organized. The greater part of all the work has been done by him. A few months after these clinics were established, the Junior League of Raleigh established a prenatal clinic in connection with its baby clinic. Dr. Goode Cheatham operated this clinic for a few months. Dr. Oliver has had it in charge since that time. All three clinics are now operating regularly and in a systematic manner. The clinics at Rex and St. Agnes Hospitals are operated in connection with their regular outpatient clinics. Dr. Oliver calls freely on specialists connected with both hospitals for consultations and assistance in any of his cases requiring medical, surgical, urological, roentgenological, or eye, ear, nose or throat consultation and treatment. He has full co-operation from all departments. In the Junior League clinic, a visiting nurse assists by checking up on the patients and encouraging them to return to the clinic in order to secure adequate prenatal care.

Rex and St. Agnes Hospitals have co-operated and have always admitted abnormal cases and cases presenting any emergency.

In all clinics, the financing has been purely local. There has been no outside or government aid except for the F.E.R.A. aid of \$17.50 paid to the physicians for making a few of the deliveries in 1934. When no funds were available with which to buy medicine for these patients, the physicians have furnished them.

More than 800 charity patients have been delivered after having received prenatal care in these three clinics. For the past few years there has been an average of about 150 cases per year. The majority of these have been white women. Most of the deliveries have been made in the Rex and St. Agnes Hospitals and the remainder have been delivered at home. More than 3,500 visits for prenatal care have been made to the clinics. The astounding result of this work is that no woman who attended any one of these clinics has died. Every one of them has made a satisfactory recovery. Only one patient developed eclampsia. In this case it appeared so suddenly that prevention was impossible. She was hospitalized and made a satisfactory recovery.

Dr. Oliver has accomplished this by dint of much hard work and painstaking effort. For the past two years he has been ably assisted by Dr. Robert Ruark. With their consultants from other departments, they have been able to correct many defects and various deficiency diseases, including cases of pellagra. A considerable number of these women have had syphilis and all of these have received treatment.

Women of this type frequently show evidences of approaching toxæmia. Such cases are put to bed at home with absolute rest and restricted diet. Other treatment is prescribed as indicated. If they fail to improve on this treatment they are sent to the hospital. Usually they recover from toxæmia and are carried through to term. When improvement failed to materialize, it has been necessary to induce labor in some cases.

It is very interesting to note that this work was begun at the beginning of the depression and that a large quantity of the work was done during the depression when there was difficulty in securing proper food and drugs. These patients are all charity cases and none of them have been able to buy what they needed or wished. Yet in spite of these handicaps:

(1) No mother has died who has attended any one of the three clinics.

(2) Adequate obstetrical and prenatal care is available to every woman in Raleigh and Raleigh Township.

(3) During the year 1936 no white woman was delivered by a midwife in Raleigh or Raleigh Township.

Raleigh Township is very much larger than the city of Raleigh and embraces all the outlying population of the city. There has been a gradual decline in the number of white birth certificates signed by midwives in Raleigh. It is doubtful if there will

ever be another one. The elimination of midwives in Raleigh has been a gradual process. It has not been accomplished suddenly. The women of the indigent class are learning the advantages of adequate prenatal care.

Another great step is being taken by Dr. Oliver and his assistants. Under his direction a survey is being made of all the Negro mothers who were delivered by midwives during the past few years. The purpose is twofold:

(1) An effort to educate the indigent women to the value of having adequate prenatal care and having a physician attend them during labor.

(2) To determine why these women called a midwife instead of a physician.

Maternity and infancy welfare is rapidly growing in favor. Every expectant mother is entitled to adequate care. We cannot control the birth rate any more than we can control the selection of expectant mothers. What we can do, and which is probably of far greater value, is to see that the mothers receive proper prenatal care and that the child is given an even break in his chances for life, health, liberty and the pursuit of happiness. Prenatal care has proved its value. For eight years prenatal clinics have been operated by the obstetrical staff of Rex Hospital for the benefit and care of any indigent expectant mother. Approximately 150 such cases are handled each year. Part of them are delivered in the hospital and part of them have been delivered at home. In the entire eight years there has not been a death of any mother who visited the prenatal clinic. If this result can be accomplished among charity patients, why do intelligent women who can pay their bills tolerate the present high maternal death rate which prevails throughout the United States? It can be reduced at any time that the intelligent women

will secure for themselves the same type of prenatal care which is received by the indigent patients in the prenatal clinics conducted by the Obstetrical Staff of Rex Hospital. This is another social condition which must be handled in the same way as other social errors, namely, by education.

The fact that no white woman in Raleigh has been attended by a midwife in more than a year shows what can be accomplished. Whenever women realize how much easier it is for them to have proper care, deaths incident to childbirth will become a negligible factor in the United States.

Acne In Young People, Its Cause and Treatment

By THOMAS C. WORTH, M.D., *State Board of Health*

THAT unfortunate form of acne, known medically as "Acne Vulgaris," and occurring so frequently in juveniles and adolescents, constitutes a most important and difficult problem. Since it causes no physical disability, some have been inclined to look on it as merely a disturbance of the skin, occurring frequently enough in young boys and girls to almost be considered "physiological," and passing away as soon as the individual is fully developed into an adult. Such is not the case in many instances. Severe acne may begin in the early "teens," may persist month after month, even years, responding sluggishly, if at all, to known forms of treatment, recurring frequently, and causing permanent damage to the skin. Surely this disturbance demands most careful thought and study; its treatment being considered as important as in that of any serious, disabling disease.

In the juvenile age group, loss of a fine, clear complexion is felt more keenly than at almost any other time of life. Severe acne, during this crucial period, is not only unsightly during its long, trying period of occurrence, but in so many cases leaves a scarred and discolored face, which to girls, especially, is a source of considerable embarrassment and mental

anguish. Of course the face is not alone affected, but is by far the chief cause of concern. Every course of treatment, then, should include, in addition to known specific measures, such as X-ray, vaccine, etc., a good deal of sound psychological advice, to aid in the adjustment of the young patient to her surroundings and her companions.

Preponderant evidence at present places the blame for acne vulgaris during this age group, at least, on some defect in the endocrine system. It surely is a most important cause and may even be the sole responsible factor. A hormone or combination of hormones, probably the same that stimulates the growth of axillary and pubic hair, causes a piling up of cells around the exits of sebaceous glands, with blockage of the ducts or the openings and formation of comedones (blackheads). The process may stop right here or go on to a second stage, where apparently, under the same stimulus, these oily or sebaceous glands increase their secretions. The opening being stopped up, swelling occurs, infection by bacteria already present sets in and a typical "pimple" is the result. Often infection does not occur; in that case no "head" will appear, but a red, raised, painful and unsightly mound of varying size will

gradually appear and just as gradually subside; a slow, stubborn, process. Whereas the importance of the hormones cannot be denied as a cause of acne, at present it is not known how the factors are responsible. Is it the kind or the amount of secretion that must be regulated? All juveniles are subject to about the same changes, but, certainly, all of them do not develop acne.

For many years we have heard that anemia, constipation, points of infection and menstrual disorders were capable of causing acne, or at least were secondary causes. There are many patients with severe acne, however, who show none of these deficiencies; nevertheless, before beginning treatment of any patient, it is advisable to have that individual in as good physical condition as possible. Constipation or any gastro-intestinal irregularity must be removed.

Each patient must conscientiously follow instructions set forth by the physician, never allowing suspension of the rules at any time, for it takes long months of careful study and treatment. There is no quick road to relief. Each patient must be treated as an individual, the most suitable methods being selected in accordance with her own individual needs.

Diet is a puzzling factor, whereas improper diet is not considered a major cause of acne, it is well established that dietary indiscretions may bring about a recurrence. Thus, patients are strongly advised to eat sparingly of sugar, pickles, cheese, pork, sausages, extremely hot or highly seasoned foods, always avoiding foods too abundant in fats and oils. Tobacco, coffee, and tea should be used sparingly; abstinence from alcohol is recommended. Complete diet lists should be obtained from the physician and carefully followed. Yeast, despite what great foreign physicians have to

say, is only helpful when the patient suffers from constipation. Drugs with iodides and bromides should be avoided, as they tend to produce acne in some individuals.

The finest local treatment is strict cleanliness, maintained with a mild soap and plain water. Creams are not only worthless and expensive, but some may even be harmful, because it is an oily skin we are trying to avoid. Suitable astringent or "drying" lotions are helpful, for they tend to decrease secretion of sebaceous glands and promote unblocking of the ducts and allowing drainage.

Blackheads should not be squeezed, but removed with a special device designed for that purpose, and obtainable at some barber shops and drug stores. Ultra-violet lamp treatments have not been beneficial in a majority of cases. Vaccines of many kinds have been recommended and used; some are made from organisms taken from the patient (autogenous); others are stock vaccines. None are particularly successful. Neoarsphenamine has been used in stubborn cases and found beneficial.

Perhaps the most successful special treatment for acne has been the X-ray. As a general rule it is not recommended for patients under eighteen years of age, except in especially resistant instances, because of the frequency of recurrence in younger individuals. Since the acne is due to an endocrine imbalance, X-ray does not alter the fundamental cause, only acts in a local fashion directly on the lesions themselves. Consequently, as soon as it is discontinued, recurrence of the acne is extremely common. Treatments are expensive and are thus not available to many who really need them. Only expert roentgenologists or X-ray men should be allowed to administer these treatments. In experi-

enced hands they are harmless; in inexperienced, dangerous.

As a most hopeful form of treatment we are looking forward to the use of the hormones, either preparations from the pituitary gland or substances secreted by this gland. Lawrence, in a recent study of thirty patients, in which he made injections of a "pituitary-like" hormone every other day, reports ten patients regarded as cured, eleven much improved, and seven regarded as showing only moderate improvement. He concludes that evidence from his studies is strongly suggestive that an under-functioning of the anterior part of the pituitary gland is the prime factor in the causation of acne. Although too early to say definitely whether this mode of treatment will be universally practical to use, it

certainly merits most careful further study, since it is an attempt to attack the disturbance at its source. Until such a logical and effective treatment is universally available, unfortunate acne sufferers should use the methods at hand, the prime and most important stipulation being strict observation of the physician's orders over the long, trying period of treatment.

(1) *Acne Vulgaris*, J. C. Michael, JAMA 105, 327-331, August, 1935.

(2) *New Treatment for Pustular Acne*, A. W. Sohrweide, SMJ 28, 376.

(3) *Treatment for Acne*, J. Comblat, JAMA 104, 639, Feb., 1935.

(4) *The Anterior Pituitary-like Hormone in Clinical Study of the Effect on Acne Vulgaris*, C. H. Lawrence. JAMA 106, 983-987, March, 1936.

National Negro Health Week Observance

By WALTER J. HUGHES, M.D., *State Board of Health*

THE Negro Organization Society of Virginia in 1913 demonstrated the value of a popular periodic campaign for a general cleaning up of homes, lots, fields and the community at large in all parts of the state. The co-operation of the State Board of Health and the local Health Department as well as of several volunteer agencies in the several communities was solicited to effect an extensive observance of the clean-up week with wholesome and gratifying results. Dr. Booker T. Washington visualized the possibilities of such a health movement for the race as a whole, and in the year 1915 at Tuskegee Institute issued a proclamation for a National Health Improvement Week which later became the National Negro Health Week.

After the death of Dr. Washington, Dr. Robert R. Moton guided the National Negro Health Week toward its destined objectives. In his article,

"Organized Negro Effort for Racial Progress," briefly defined the origin of the health work:

"Another movement of large public significance which has met with gratifying success and which also originated within the race itself is what is known as National Negro Health Week. This movement originated in Virginia in 1913, but was shortly after nationalized by the late Booker T. Washington, through the medium of the National Negro Business League. It is an annual observance in which local, county, state and national organizations of both races, as well as the Federal Government, now co-operate. The object is of course to improve the health of Negroes and the conditions under which they live, in view of the disproportionately high death rate among Negroes in America. Although the movement has the fullest support and co-operation of the medical profession,

it is an interesting fact that it was not organized in the medical group, and that every type of organization from business firms to fraternal societies share in the effort."

At first the organization had as its major objective clean-up activities and the dissemination of health information by lectures, sermons and the distribution of literature. As time went on, the movement extended its activities into the field of preventive medicine, undertaking the problem of immunization, periodic health examinations and practical demonstration of keeping-fit methods. This work grew to such an extent that a conference was held in Washington on March 19, 1929, which resulted in a resolution to the effect that the Health Week should be established on a year-round basis and that support be received from interested sources. On October 29, 1930, definite steps were taken to put this work on a full-time basis. "National Negro Health Movement" was chosen for the title of the year-round organization to be conducted under the auspices of the Annual Tuskegee Negro Conference, National Negro Business League, the National Medical Association and the National Negro Insurance Association in cooperation with the United States Public Health Service, state, county and city health departments. The Julius Rosenwald fund included the National Negro Health Movement in its budget for health service during the period of promotion and establishment of the organization. Since July 1, 1932, the United States Public Health Service has provided quarters and operating facilities for Negro Health Work, and since July, 1924, a Negro director with the title of Health Education Specialist. The office personnel includes also a clerical and stenographic assistant.

The 23rd anniversary of National Negro Health Week will be observed

from Sunday, April 4th, through Sunday, April 11th. The Health Week comprises the following special days and activities:

Sunday, April 4. *Mobilization Day*—Health sermons, health talks, popular mass meetings.

Monday, April 5. *Home Health Day*—*Home clean-up*. Parents' meetings. Separate meetings for mothers and for fathers. Consider proper sex education. Provide for annual health examinations.

Tuesday, April 6. *Community Sanitation Day*—Activities for sanitation needs and improvements. Water, food, and milk supply, waste disposal, clean streets, paving; safe wells; sanitary privies.

Wednesday, April 7. *Special Campaign Day*—Survey of community health needs and concentration on one or more practical objectives. Contact official health department—request help.

Thursday, April 8. *Adults' Health Day*—Emphasis on annual health examinations with opportunities for examination. Health talks to men's and women's organizations. Encourage home health.

Friday, April 9. *School Health Day*—*Invite parents*. Health essays, songs, games, plays, parades, pageants. Health examinations for pre-school and school children. School clean-up. Organize health clubs. Emphasize "Health, First" as the first aim of education.

Saturday, April 10. *General Clean-Up Day*—Co-operative large scale clean-up activities. Inspection of community campaign results, take pictures for reports and newspaper stories.

Sunday, April 11. *Report and Follow-Up Day*—Close campaign with enthusiastic meeting for reports and talks.

This movement has been productive of much good, for this week is celebrated with enthusiasm in practically all of the rural schools in the South, and the teachers not only make good talks themselves, but secure a physician in their community to give talks, and in most communities the local Negro Medical Society co-operates to the fullest extent with this program.

The National Negro Health Week Movement co-operates with the following agencies: Annual Tuskegee Negro Conference, National Medical Association, National Negro Business League, National Negro Insurance Association, in co-operation with the United States Public Health Service, state, county and city health departments and various voluntary health civic organizations.

Wives of State Officials Propose Syphilis Tests For Domestic Servants

THE ladies of the Sir Walter Cabinet have recently requested that a State law be drawn up and passed by the Legislature requiring all domestic servants to be examined and have a blood Wasserman test performed before they will be issued certificates. These ladies realize that if 22 per cent of Negroes in this State are infected with syphilis and if we are to discharge every domestic servant who has a positive Wasserman, we will, of course, get rid of one in every five. The important point to remember is that when a domestic servant or, for that matter, any worker is found to have a positive Wasserman he should not be discharged from his job, but should be segregated temporarily, receive adequate treatment until he is pronounced non-infectious and then allowed to return to his job, under observation, and of course still receiving treatment until an adequate course has been given him and he has been pronounced cured. These same rules apply to industry.

It is obvious that a worker who has been infected, but who is receiving treatment and who is non-infectious is a far safer person than one who has never been examined. This is of course true because a person who has never had a blood Wasserman is an

unknown quantity, whereas one who is infected, but non-infectious and receiving treatment is a safe employee.

If such a law were to be passed we would accomplish two main purposes: First, we would have a safe employee in the home or factory who is able to retain his job, is not dangerous to his fellow-men or employers and at the same time who is receiving treatment for himself which will prolong his own life and prevent a great deal of misery and unhappiness; and second, it will be another example of teaching a class of people, even with a heavy percentage of infection, what constitutes an adequate course of treatment for syphilis. It is just another approach in the relentless war being waged against the venereal diseases. It is only by working from many different angles that these diseases will be controlled.

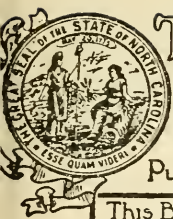
1937 EASTER SEAL



Easter Seals are sold to raise funds for needy crippled children, mainly to buy them crutches and braces. Use them on your cards and letters. On sale, March 22-28.

TOTAL NUMBER BIRTHS AND DEATHS UNDER 1 YEAR OF AGE
(Exclusive of Stillbirths) IN EACH COUNTY WITH RATE PER
1,000 LIVE BIRTHS: 1935

COUNTY	BY PLACE OF BIRTH			BY PLACE OF RESIDENCE			COUNTY	BY PLACE OF DEATH			BY PLACE OF RESIDENCE		
	Total No. Births	Total No. Deaths	Death Rate	Total No. Births	Total No. Deaths	Death Rate		Total No. Births	Total No. Deaths	Death Rate	Total No. Births	Total No. Deaths	Death Rate
Entire State	79,596	5,407	67.9	79,502	5,399	67.9	Johnston	1,591	125	78.6	1,634	150	91.8
Alamance	1,053	51	48.4	1,088	61	56.1	Jones	296	25	84.4	317	28	88.8
Alexander	334	19	56.9	337	19	56.4	Lee	383	18	47.0	382	18	47.1
Alleghany	149	8	53.7	151	7	46.4	Lenoir	962	102	106.0	928	91	98.1
Anson	708	42	59.3	689	42	61.0	Lincoln	560	34	60.7	540	33	61.1
Ashe	540	33	61.1	553	34	61.5	McDowell	619	30	48.5	616	29	47.1
Avery	451	17	37.7	403	14	34.7	Macon	426	15	35.2	415	15	36.1
Beaufort	925	81	87.6	915	79	86.3	Madison	613	38	62.0	625	41	65.6
Bertie	742	89	119.9	748	91	121.7	Martin	786	57	72.5	798	59	73.9
Bladen	719	52	72.4	727	54	74.3	Mecklenburg	2,483	157	63.2	2,397	150	62.6
Brunswick	453	25	55.2	465	28	60.2	Mitchell	455	21	46.2	469	22	46.9
Buncombe	1,986	128	64.4	1,933	122	63.1	Montgomery	345	26	75.8	358	26	72.6
Burke	794	39	49.1	800	41	51.3	Moore	530	34	64.2	535	34	63.6
Cabarrus	982	49	49.9	1,056	51	48.3	Nash	1,488	100	67.2	1,469	92	62.6
Caldwell	920	53	57.6	916	54	59.0	New Hanover	894	97	108.5	820	70	85.4
Camden	106	5	47.2	112	6	53.6	Northampton	622	34	54.7	647	35	54.3
Carteret	390	19	48.7	382	20	52.4	Onslow	469	29	61.8	487	30	61.6
Caswell	437	25	57.2	450	27	60.0	Orange	355	16	45.1	416	25	60.3
Catawba	1,095	61	55.7	1,110	62	55.9	Pamlico	232	16	69.0	236	17	72.0
Chatham	422	32	75.8	429	33	76.9	Pasquotank	370	37	100.0	356	36	101.7
Cherokee	473	20	42.3	472	20	42.4	Pender	364	30	82.4	382	33	86.4
Chowan	264	19	72.0	266	20	75.2	Perquimans	251	18	71.7	259	18	69.1
Clay	124	9	72.6	127	9	70.9	Person	667	29	43.5	681	34	49.8
Cleveland	1,348	61	45.3	1,358	61	44.9	Pitt	1,555	124	79.7	1,578	132	83.6
Columbus	1,149	78	67.9	1,204	85	70.6	Polk	225	23	102.2	219	11	50.9
Craven	673	54	80.2	672	54	80.4	Randolph	834	45	54.0	845	49	58.4
Cumberland	1,151	92	79.9	1,108	82	74.0	Richmond	891	48	53.9	908	49	54.4
Currituck	128	2	.....	129	2	.....	Robeson	2,199	136	61.8	2,165	134	61.9
Dare	102	1	.....	108	1	.....	Rockingham	1,268	61	48.1	1,289	66	51.2
Davidson	1,087	89	81.9	1,107	93	84.0	Rowan	1,237	73	59.0	1,244	71	57.7
Davie	369	14	37.9	386	15	38.9	Rutherford	972	37	38.1	979	41	41.9
Duplin	1,062	79	74.3	1,093	87	79.6	Sampson	1,209	95	78.6	1,218	102	83.7
Durham	1,730	193	111.6	1,482	132	89.1	Scotland	507	48	94.7	511	48	93.9
Edgecombe	1,262	128	101.4	1,242	123	99.0	Stanly	664	35	52.7	666	35	53.3
Forsyth	2,499	165	66.0	2,426	163	67.2	Stokes	486	22	45.3	492	22	44.7
Franklin	682	37	54.3	699	40	57.2	Surry	1,002	74	73.9	984	73	74.4
Gaston	1,849	141	76.3	1,884	146	77.5	Swain	351	18	51.3	355	18	50.8
Gates	257	22	85.6	258	22	85.3	Transylvania	274	12	43.8	279	11	39.8
Graham	171	10	58.5	175	10	57.1	Tyrrell	140	11	78.6	142	11	77.7
Granville	734	46	62.7	745	47	63.1	Union	982	54	54.9	986	55	55.5
Greene	659	39	59.2	674	46	68.2	Vance	638	71	111.3	627	69	110.0
Guilford	2,712	173	63.8	2,674	159	59.5	Wake	1,996	149	74.6	1,988	144	72.2
Halifax	1,568	115	73.3	1,549	119	76.8	Warren	715	73	102.1	727	81	111.1
Harnett	1,186	81	68.3	1,205	88	73.0	Washington	295	31	105.1	300	32	106.6
Haywood	869	39	44.9	890	43	53.1	Watauga	370	20	54.1	383	23	60.6
Henderson	608	27	44.4	602	27	44.9	Wayne	1,186	125	105.4	1,192	127	106.6
Hertford	440	30	68.2	447	32	71.6	Wilkes	1,053	46	43.7	1,056	44	41.1
Hoke	386	23	59.6	392	23	58.7	Wilson	1,361	140	102.9	1,362	134	98.8
Hyde	196	6	30.6	202	6	29.7	Yadkin	429	19	44.3	463	22	47.7
Iredell	1,153	49	42.5	1,037	48	46.3	Yancey	396	21	53.0	402	22	54.4
Jackson	503	38	75.5	508	39	76.8							



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Vol. 52

APRIL, 1937

No. 4

THE NEW REX HOSPITAL, RALEIGH, N. C.



Made Possible Through the Generosity of John Rex, who died in 1839

The above picture shows the new 200-bed hospital nearing completion. It is situated on a beautiful knoll near the half million dollar Broughton High School. It is to be occupied in April. Mr. Rex left about \$10,000 for a hospital. This sum was invested and by 1861 amounted to \$30,000. Several years later, the trustees bought the mansion of Governor Manly, in which the St. John's Guild were already operating a hospital. In 1909, a new building was erected.

It was one of the first general hospitals established in the State; and its nurse's training school one of the first and always one of the best.

The new hospital building is a result of united community effort. We trust that the new and greater institution may be to the fullest extent a haven for the weary, a refuge for the sick and a shining light, guiding the way toward the prevention of preventable disease.

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FREE HEALTH LITERATURE

The State Board of Health publishes monthly **THE HEALTH BULLETIN**, which will be sent free to any citizen requesting it. The Board also has available for distribution without charge special literature on the following subjects. Ask for any in which you may be interested.

Adenoids and Tonsils	German Measles	Scarlet Fever
Cancer	Health Education	Smallpox
Constipation	Hookworm Disease	Teeth
Chickenpox	Infantile Paralysis	Tuberculosis
Diabetes	Influenza	Tuberculosis Placards
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Don't Spit Placards	Measles	Typhoid Placards
Eyes	Pellagra	Venereal Diseases
Flies	Residential Sewage	Water Supplies
Fly Placards	Disposal Plants	Whooping Cough
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SPECIAL LITERATURE ON MATERNITY AND INFANCY

The following special literature on the subjects listed below will be sent free to any citizen of the State on request to the State Board of Health, Raleigh, N. C.

Prenatal Care (by Mrs. Max West)	Baby's Daily Time Cards: Under 5 months;
Prenatal Letters (series of nine monthly letters)	5 to 6 months; 7, 8, and 9 months; 10
Minimum Standards of Prenatal Care	11, and 12 months; 1 year to 19 months
Breast Feeding	19 months to 2 years.
Infant Care. The Prevention of	Diet List: 9 to 12 months; 12 to 15
Infantile Diarrhea	months; 15 to 24 months; 2 to 3
Table of Heights and Weights	years; 3 to 6 years.
	Instructions for North Carolina Midwives.

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Notes and Comment

By THE EDITOR

APRIL showers not only bring May flowers, but bring floods of advertisements for all sorts of cure-alls. It is a month in which the parents of upstate rural New Yorkers cut the heavy layers of underwear which were sewed on the children in October and take them off. And in some sections of North Carolina a few layers of protective underwear are laid aside and the children particularly are given a chance at outdoor healthful exercise. Colds and sniffles begin to disappear, as the skin begins to perform its natural function, and as the fresh air from outdoors begins to get in its health-giving work.

At this season there is an increase in the number of pictures of individuals in the patent medicine advertising columns of the newspapers. A few days ago on reading one of these advertisements with a picture of a gentleman in a county not far from Raleigh appearing in the paper, certifying to what a certain wonderful medicine had done for him, etc., we requested one of our staff of nurses in that particular county to see this man at the first convenient opportunity and get an interview for us. We were prompted to do this because the statements that were accredited to the individual seemed so much like a fairy tale, and the man's picture indicated that he was a young and healthy individual,

we thought it well to check up. The nurse makes an interesting report. We quote as follows from some of it: "The young man lives on a farm with his father and is unmarried, seems to be an industrious young chap." He told the nurse that he did not make very much of a living and owned very little property himself, but was not in want and had never been sick a day in his life, except from an attack of influenza about a year ago, after which he said he felt a little poorly, which, as we all know, is a perfectly natural feeling following influenza. He decided to make inquiry of his druggist friend in a nearby city of some good medicine to help him feel a little stronger following the attack of influenza. The druggist was Johnny-on-the-spot with a bottle of high-powered stuff now going the rounds and being illustrated with the pictures of various individuals. This stuff, by the way, is a little more than a laxative. It could possibly be classed as a purgative, one of the numerous salines based on epsom salts, or, what is worse, glaubers salts. Glaubers salts, you know, is a horse medicine which is one of the most powerful purgatives, second only to croton oil, known to the medical profession. All this class of highly advertised purgative medicines is composed largely of one or the other of the two principle classes of purga-

tive drugs. One is the salines, as just above described, the other is a class of vegetable extracts such as aloin. Neither of these drugs should be taken except under the general direction of a competent physician, and should certainly not be taken in large quantity over a long period of time. In fact, no drugs should be so used by anybody at any time.

This druggist who did the prescribing naturally sang the praises of this particular remedy and requested the young fellow to come back and make a report later on, so the young man went back to the druggist after two or three weeks and reported that he seemed to be better. Most influenza cases get better with the lapse of time. The salesman for this drug, which the store was "driving" at that time, was of course on hand, it being Saturday afternoon. He was pleased to hear of the improvement and suggested to the young man that he would like to have his picture and a statement. The good-natured young chap was of course accommodating, but he gave the agent quite a different statement from what was published, or so he says.

Now to quote from the young man's statement to our nurse: "I took one bottle and that is all I have ever taken. The biggest thing it did for me was gripe my stomach. Some time later I was in the place again and a man from the company was there. He asked me to let him use my picture and run a statement in the paper. For this, he gave me another bottle. I did not know he was going to keep on using my picture, and I don't like it either, because he added a lot I never told him." The nurse then asked the young fellow about his "run-down" condition which had been so promiscuously advertised along with his picture. The young man replied: "I ain't never been that way nor had any gas on my stomach, either. The man just

added that. I wish you would tell me how to get him to stop. He has been running it in the papers for about six months or more and the only thing I have ever got for it is one free bottle of the stuff, and I have never taken a dose of that. I got well of the flu and have felt as good as I ever have, ever since."

We are publishing the foregoing because it is about the kind of a statement we have always received from practically every individual we have ever had occasion to interview a few months after giving a company representative permission to publish the individual's picture and put in just what the company representative wanted to say about the value of the medicine. In the past we have endeavored a few times to interview patients who had been quoted as having marvelous cures, only to find that we had death certificates in the files here in the Bureau of Vital Statistics describing the final "cure."

The use of medicine of various kinds and the compounding and sale of drugs is a vast and honorable business when conducted in a legitimate manner by honest and ethical manufacturers and druggists, but the promiscuous advertising and sale of all kinds of drugs recommended for all kinds of human ailments is often fraught with peril to the people who so easily fall victims to such habits. Many of the drugs so sold are harmless and perhaps do the individual little, if any, harm, but the class of drugs known as purgatives and those loaded heavily with alcohol are drugs that every individual should let alone, unless prescribed by a competent physician and purchased from an honest druggist.

* * *

WITH better roads and longer days and more money to spend, those of us who are afraid to venture out on the roads, particularly Sundays and

nights, and sit back and read the morning and evening papers giving the names of the casualty list these days, have plenty to read about. The editor of this family journal has always believed that high speed is the principal cause of death on the highways. If two cars are coming from opposite directions and each one in the middle of the road, and each driver is determined to remain in the middle of the road, and each car is going at a speed not less than 75 or 80 miles an hour, which about half such drivers maintain, the newspapers are certain to carry a list of casualties next day. If the two cars and the two fool drivers were going at a moderate rate of speed, they could at least stop and get out and argue which one could stay in the middle of the road without committing homicide, as well as suicide.

Reginald M. Cleveland, writing in the *New York Times* in a recent issue, had a most interesting article, the headline of which was "Speed Held Main Peril," with a subhead as follows: "Road Pace Above 50 Miles Called Beyond Scope of Human Eye." Mr. Cleveland quotes from a conference report made to the Secretary of Commerce in which the report states unequivocally "that a very large majority of the 36,000 fatalities occurring annually in the nation from automobile accidents occur in rural sections." The flat statement is made that "the outstanding cause of these deaths is high speed." This committee had made an exhaustive study of the fatalities occurring in a previous year.

We have always contended in all the published statements we have made in THE HEALTH BULLETIN that the most important requisite for the driver of an automobile next to sobriety is good eyesight. This report, quoted by Mr. Cleveland, goes into detail and offers a very interesting explanation of how sight reacts to speed.

The report really comprises a book. These investigators "found that at 45 miles an hour the average good driver is focusing his eyes 1,270 feet ahead; at 50 miles, 1,430 feet ahead; at 60 miles, 1,800 feet ahead, and at 65 miles, 2,000 feet, or about two-fifths of a mile. Beyond 65 miles an hour, they say, the eye practically points straight out toward infinity and the focal point is the distant horizon on the road. At 60 miles an hour, which most good drivers feel they can take easily on an open road without obstructions, the eye is being called upon to see accurately and in detail at over 1,800 feet per second while it is traveling at a rate of 88 feet per second. And, of course, it can't be done."

The hog that persists in staying in the middle of the road and that insists on cutting in and cutting out of the line of travel, cutting corners in town and doing other hair-raising stunts, is always found to be a driver who is not content to run less than 60 or 75 miles an hour. If such drivers could be eliminated from the public highways of the United States all automobile killings would drop about 1,000 per cent overnight.

* * *

THE *Georgia Health Bulletin* for February has an interesting short article coming from the Georgia Experiment Station of the University of Georgia, reporting some investigations upon the use of peanut meal as a preventive and cure of pellagra. If our own experiment stations have made any such report, we do not know anything about it. However, a letter directed to the North Carolina Experiment Station, State College, Raleigh, N. C., requesting information on the subject might procure a similar pamphlet.

Right now we do not know where peanut meal could be obtained, that is, the form in which it is recommended

by the Georgia Experiment Station for patients having pellagra, and as a preventive for those predisposed to the disease. We hope that our peanut growers in the northeastern section of North Carolina will procure more definite information along these lines and make this product available to our own people.

* * *

IN our March issue we published the list by counties giving the infant death rates for the year 1935. We had been unable to receive up to that time a list of the rates in all the other states for that year. Since our March

issue came from the press we have received from the United States Bureau of the Census the rates for the other states and the District of Columbia. We are publishing those figures in this issue. People who are interested in these tabulations, and that should include every thinking citizen in the State, should file carefully the March and April issues of *THE HEALTH BULLETIN* containing this information. The list will be found on another page. It is hardly necessary to call attention to the fact that, as usual, North Carolina occupies its accustomed place as one of the high-rate states.

Vitamins, Or Accessory Food Factors In Our Diet

By T. C. WORTH, M.D.

IT was in 1896 that Eijkman, working with the Dutch East Indian Medical Service, first showed the necessity of an "accessory food factor" in our diet. Using chickens in his experiments, he fed them diets of polished rice, that is, rice with the hulls removed, and was able to produce a disease which he called "polyneuritis galinarum." So great was the similarity of this experimental disease to beri-beri, a deficiency disease which develops in humans fed on polished rice, he concluded the latter was also the result of a faulty diet. Thus he reopened a great new subject to medicine. Students of beri-beri in many countries began working to find out about these mysterious food factors. It must not be understood from this that the ancients knew absolutely nothing about deficiency diseases, because 2,500 years before the birth of Christ the Chinese are said to have known about beri-beri. Nearly 200 years ago James Lind knew that there was some sort of relationship between scurvy and the

diet, and about the same time pellagra was first clearly described. But Eijkman was the first to demonstrate a specific diet as being the cause of a deficiency disease.

In 1911 Casimir Funk isolated a crystalline substance from rice hulls which prevented polyneuritis in fowls. He called his product a "vitamine," from the Latin "vita," meaning "life," and the chemical word "amine," meaning nitrogenous. Later it was learned that all vitamins did not contain nitrogen, so the final "e" was dropped. The name has been since retained to designate the entire group of food factors.

During the past twenty-five years the increase in our knowledge of vitamins has been almost incredible. Ideas have changed so rapidly that it has been almost impossible to keep up with them. In 1932, for example, there were 332 papers published concerning Vitamin D alone; about 1,000 papers on the entire subject of vitamins. Yet, despite such intensive efforts, many problems remain unsolved. Indeed, as

knowledge steadily advances, some problems concerning vitamins become all the more perplexing. Questions once thought to be adequately answered and resting on sufficient proof are continually bobbing up again, supported on the surface of some recent experimental evidence.

A vitamin is defined as "one of a class of substances of unknown composition, existing in minute quantity in natural foods and necessary for normal nutrition and growth, absence of which from the diet produces deficiency diseases, such as beri-beri, scurvy and rickets." The "unknown composition" given in the above definition is now only true for part of the vitamins, since some have been isolated in pure chemical form. Vitamin C is obtainable as cevitamic acid, Vitamin A in the form of a closely allied substance, a provitamin, and Vitamin D in the form of Viosterol, fish liver oils, and their concentrated products. Vitamins contribute no energy or calories to the diet, and occur in very small amounts, but are, nevertheless, absolutely essential. They are present in adequate amounts in normal human diets, especially when natural foods are included. The modern tendency to treat raw foods by mechanical heating and chemical methods most likely destroys many necessary factors, and thus partly accounts for an apparent increase in deficiency diseases in recent years.

To prevent deficiency diseases is far easier than to cure them. For this reason every one should have at least a fundamental knowledge of vitamins in order that in building up any diet these factors can be used in proper proportions. Today we realize better than formerly that "mild vitamin deficiencies" occur with great frequency, not always in the poorer classes who are unable to purchase an adequate diet, but often in those who can afford any

type of food but do not know how to select it. Mild vitamin deficiencies are extremely prevalent, are difficult to recognize since symptoms are not fully developed, and are for this reason frequently untreated. On the other hand full-blown deficiency diseases are more uncommon, easier to recognize and respond dramatically to treatment with the missing food factor or vitamin.

After these few introductory remarks, I shall try to touch briefly on each vitamin, giving a list of its most important sources and a summary of the deficiency disease which develops when each factor is absent from the diet.

Fully developed deficiencies due to Vitamin A are considered rare in this country, especially among adults, but mild forms are now thought to be rather common in children, as shown by a new test to determine light sensitivity in apparently normal persons. Vitamin A deficiencies can show lack of growth, especially of teeth and bones; night blindness; a characteristic eye disease, known as xerophthalmia; and a disturbance of all epithelial structures. In glandular organs, cysts are found, filled with yellow cheesy material, formerly thought to be abscesses. These are now known to be due to casting off of epithelial cells in ducts, the trachea and bronchi with plugging by this cheesy material; the latter furnishing a culture medium for bacteria which were already present. Recent evidence seems to show that Vitamin A does not protect against infection at all, but has as its first duty that of maintaining the normal functioning of epithelial cells.

Vitamin A has not been isolated in pure form, but substances closely related to it are now obtainable, called Provitamin A or Carotene. Most potent sources are butter, the yellower the better, cream and milk, cheese,

cod and halibut liver oils, eggs, apricots, livers of grass-fed animals, whole wheat bread, pigmented vegetables such as tomatoes, and yellow corn; green vegetables such as spinach, cabbage, lettuce, Brussels sprouts, watercress, and green peas.

Next, there is a group of vitamins known as the Vitamin B complex. Some workers divide the group into as many as seven different parts. For simplicity, I shall give only the main divisions, together with the diseases they are thought to cause.

Vitamin B-1, the first division, is destroyed by heat. Deficiency of this vitamin causes beri-beri in both humans and experimental animals, characterized by swelling enlargement of the heart, degeneration of muscles, and degenerations of the nervous system, or polyneuritis. When Vitamin B is administered to those patients they respond with an almost unbelievable speed.

Alcohol has long been blamed as a cause of one form of polyneuritis, but it has been conclusively shown that old chronic alcoholics evidently forget to do a great deal of eating. The polyneuritis found in these people is not due to alcohol, but to a true Vitamin B deficiency, which has developed as a result of an inadequate diet.

Vitamin B-2, the second division, is not destroyed by heat, and has been divided into at least three different parts. Most important for us to know is the "Pellagra Preventive Factor" which is thought to prevent the deficiency disease, pellagra. It is a disease that should concern all North Carolinians. It is right here among us and is taking a large yearly toll from our population. In North Carolina during 1935 we had 732 cases with 392 deaths, and in 1936, 831 cases with 348 deaths. Not only is it tragic to see so many deaths from fully-developed pellagra, but there is so much

suffering and unhappiness among those with milder forms of the disease. Whereas the final word has not been written about this problem, one is certain that if he has an adequate diet he is not likely to ever be bothered with pellagra.

Vitamin B has as one of its primary functions to stimulate and maintain a healthy appetite. When it is cut out of the diet one loses all desire for food and soon may stop eating entirely.

The entire Vitamin B complex is found especially plentiful in yeast and liver, also in milk, eggs, wheat germ, whole grain bread and cereals, kidney, brains of animals, tomatoes, green leafy vegetables, such as lettuce, turnip tops, cabbage and spinach, and in peas and carrots.

When Vitamin C is absent from the diet, a disease known as scurvy results, so that this particular vitamin has been called the "anti-scorbutic" vitamin. It has been made up in purely chemical form and can be bought as "cevitamic or ascorbic acid." But it will not be necessary to buy these pure forms of Vitamin C if one will be sure that his diet includes the natural sources mentioned below. Scurvy is a disease, most frequently seen in infants, who may show bleeding gums and loosening of the teeth, bleeding in many parts of the body, especially in the bones, and marked changes in the tissues.

Sources are as follows: fresh fruits, lemon juice, orange juice, tomatoes; also grape juice, strawberries, milk, green vegetables, string beans, spinach, cabbage, watercress and carrots.

Vitamin D is the anti-rachitic food factor, and is probably identical with a substance called viosterol. Its use in early infancy, either as viosterol or in cod liver oil or haliver oil, to prevent rickets, is known by mothers in the most remote rural areas. Rickets is a disease in which the most out-

standing trouble is one of improper development of growing bones, but since the discovery of Vitamin D it has been almost entirely stamped out.

Viosterol is not a drug for mothers to use except under orders of a physician. It can, when given in improper doses, cause calcium to be deposited in infants' tissues, especially in the heart and blood vessels; whereas, under supervision, it is safe and is as good a source of Vitamin D as can be obtained. Many reliable brands of cod liver and halibut liver oils are obtainable, and are safe for the mother to use.

Important sources of Vitamin D are:

1. Viosterol.
2. Cod liver oil or haliver oil.
3. Other fish liver oils.
4. Milk and cream (irradiated milk is now on the market and is an especially rich source of Vitamin D.)
5. Sunshine or artificial sun lamps.

Vitamin E is known as the anti-sterility vitamin, because when withheld from the experimental animals

it often causes abortion of the young. Its action on the human is too uncertain for it to be of any practical value at the present time.

A few sources are: wheat germ, milk, lettuce, spinach, alfalfa, watercress and seeds.

From this brief summary one can easily see what an important part vitamins play in keeping us healthy—they ward off these dreaded deficiency diseases. While the average grown-up will have all necessary vitamins in his food, the many cases of deficiency diseases in North Carolina each year prove that some of us still do not know about these protective factors. Every one should learn about vitamins and see that they are included in the diet. Infants deserve special consideration, care being taken to see that they receive cod liver oil and orange juice, in the manner recommended by the pediatrician or family physician.

Note: Bibliography omitted for lack of space.

The Syphilis Control Problem In North Carolina

*By J. C. KNOX, M.D., Director, Division of Epidemiology, North Carolina
State Board of Health*

DURING the past few months an unusual amount of publicity has been given to the problem of the venereal diseases, particularly syphilis. Magazines, newspapers and other publications that heretofore have refrained from using reading material of this nature are now taking a prominent part in this nation-wide publicity campaign. All this is evidence that the people of this country have become intensely interested in this problem, and there is no doubt that if such interest

can be directed into the right channels and sustained over a long enough period much good can be accomplished.

The estimate of syphilis prevalence in the United States and in North Carolina is based on data collected by Federal and State health officials, even though that data may be incomplete and the true prevalence of the disease not known. The majority of syphilis cases in North Carolina occur in young adults, approximately 68 per cent being found in those under thirty years of

age. There is very little difference in the incidence of the two sexes; males and females are about equally affected by the disease. Although all classes of people may be affected by syphilis, the lower economic levels show a higher percentage of cases. In a survey in recent years in North Carolina the percentage of positives for those examined was two and a half times higher for the Negro race than for the white race. In 1936 the specific rate for reported cases from these two races was ten times higher for the Negroes than for the white race. We do not intend, however, to minimize the extent of the syphilis problem among the white people of North Carolina. We have a very definite problem, for syphilis recognizes no boundary lines, racial or economic.

Among the various groups of our population affected by syphilis there is one of vital importance to which we direct attention: the pregnant women with syphilis. Early and continued treatment for the syphilitic pregnant woman is absolutely necessary if a healthy baby is to be born. It has been estimated that approximately 85 per cent of all children born alive of mothers with untreated hyphilis have the disease; a great number of these babies die in the first few weeks of life. Such prospective mothers, even though they have syphilis, may give birth to normal healthy children if adequate treatment is begun before the fifth month of pregnancy and continued throughout the term of pregnancy. All pregnant women, therefore, should have blood tests made to determine whether or not they have the disease. This precaution is no reflection on any one, because a majority of women who have syphilis have acquired it innocently.

The individual who is infected with syphilis should seek the aid of a competent medical practitioner at the ear-

liest evidence of any infection, because it is in this stage that treatment offers the greatest hope of cure. At this time, if patients place themselves under the care of a competent physician approximately 85 per cent of them may be cured, provided they continue treatment for approximately 18 months with a period of observation of two years following the course of treatment. Treatment must consist of adequate drugs given at intervals found to be most effective in combatting this disease. It is recommended at this time that treatment should be continuous; in other words, the drug used should be given in sufficient quantity each week for a period of approximately 18 months. This seems a rather long time, but the patient is not incapacitated nor necessarily kept from his or her usual gainful activities. One of the greatest difficulties encountered in the treatment of syphilis is the fact that all signs and symptoms of syphilis disappear quickly under treatment, which gives the patient a false feeling that treatment is no longer necessary. This is a critical moment for the patient, for it has been proved that unless treatment is continued until the patient is cured (which we know now requires approximately 18 months of continuous treatment), a large percentage of patients later develop syphilitic conditions of the heart or blood vessels, and many of them develop an involvement of the central nervous system which may lead to insanity. We wish, therefore, to reiterate the warning that syphilis is not cured by one or two injections of a drug, nor is it cured when the outward signs of the disease disappear early in the course of treatment. The cases that are inadequately treated or not treated at all and so allowed to develop into latent syphilis offer less hope of improvement than the early case. The absolute necessity for early

and prolonged treatment cannot be too emphatically stressed.

Those patients with syphilis who cannot afford treatment from a private physician cause public health authorities more concern than do those who are financially able to pay a physician for treatment. It must be assumed that those able to pay at least can secure treatment for themselves if they will, but those less fortunate individuals who cannot pay for treatment and are therefore untreated are a public health menace and must be provided with treatment at small cost, or, if necessary, free of charge. Adequate treatment, requiring approximately 18 months, of course costs a considerable sum of money. In North Carolina there are already approximately 50 public clinics treating syphilis at a small cost or free of charge. Additional clinics must be established to provide treatment for all those infected, wherever they may be, provided the density of population will permit the economical operation of such a treatment center. These patients must have constant supervision and must be impressed with the necessity of continuing treatment until they are discharged as cured.

The U. S. Public Health Service and the North Carolina State Board of Health expect to co-operate in this control work in a greater measure than ever before. Financial assistance to these public clinics will be furnished by the State Board of Health, and it is hoped that additional financial assistance will be forthcoming from the U. S. Public Health Service at the beginning of the fiscal year. Appropriations for this control program will not be available until July 1st, and of course there must of necessity be some delay after that time in the reallocation of these funds to the various local clinics, but this will be done as soon as possible after that date.

Before control measures can be instituted from which we can expect results it will be necessary for all cases to be reported to the local health departments of each county or city, and that such reports be forwarded immediately to the State Board of Health. No health department can cope intelligently with the situation unless it has a definite idea as to the proportion of the population affected by this disease. The control of syphilis requires the co-operation of all interested individuals—the practicing physician, the health officer, social agencies, the lay public and of course the patient who has the disease. Without the full and continued co-operation of each of these little can be accomplished toward the control of syphilis.

Not until such full and enthusiastic co-operation was enlisted in the fight against tuberculosis was it possible to bring that once widespread disease under control. Now tuberculosis has ceased to be the problem it once was. With intelligent execution of definitely known control procedures it is not unreasonable to expect similar results in the control of syphilis. Since 1910 syphilis has been in the group of definitely controllable diseases, for in that year a drug which is almost a specific was discovered. Derivatives of this original drug have been worked out and their usefulness demonstrated in more recent years.

The co-operation of every one is necessary if this control program is to succeed. We need not expect to make much inroad on the disease until our program has been in operation for a number of years. We cannot hope to control this disease, which has been present for so many years in a short time. It will take whole-hearted co-operation and effort sustained over a long period of time to achieve our goal—the control of venereal diseases in North Carolina.

Many Health Risks Involved In Modern Beauty Processes

By MRS. J. HENRY HIGHSMITH, *Assistant Director, Health Education*

NEVER before in history, except in the days of ancient Greece, perhaps, has there ever been so much attention given to physical beauty as there is today. Think of the millions of dollars invested in machinery devoted to one or two beauty processes only—to put the crimp in the hair for one race and to take it out for another! Think of other millions invested in the manufacture of beauty-producing goods and appliances, such as lotions, oils, grease, paints, paste, perfumes, and the various paraphernalia used for shaping the body, mainly for reducing it. Surely neither the Greeks nor the Romans, with all their arts and artifices employed in the quest for beauty, measured up to the American women of today. In true American style they surpass them all—the Egyptians who taught the use of paints, perfumes and oils, also the beauty treatment for the eyes and the painting of the finger nails; the Greeks who gave the world models of natural beauty of the human body; the Romans who perfected and carried to extreme, perhaps, the health baths, and all the other nations who have devised ways and means for making their women beautiful.

Neither the State Board of Health nor the writer has any quarrel with any one, man or woman, who wishes to improve his or her looks. On the other hand, we commend it. The point we wish to make in this connection is that too much emphasis is being placed on the artificial processes of beauty culture—on machines, manipulations, fads and fancies, and too little on knowing and maintaining the real

basis of beauty, which is a healthful body.

Health workers throughout the country are agreed that if physical beauty and its counterpart, personal health, are to become lasting qualities in the life and character of the American people, women must be more rational. They must seek to know and apply daily the fundamental principles underlying health, beauty and character. Simply stated, these are correct eating habits, sufficient rest and sleep, outdoor exercise, regular and normal elimination, and, above all, control of the emotions.

In the first place, women must use common sense in meeting much of the high-pressure sales talk of today. They are said to be more credulous than men, of being easily duped, and of making it possible for charlatans and imposters to flourish throughout the country at their expense. I do not subscribe altogether to this accusation, but I do know that some women take little pains to know what it is they buy, whether their purchases be cosmetics, medicine, food or clothing. Oftentimes they purchase potent poisons in the name of medicine, such as headache remedies, cold cures, and sleeping tablets, not knowing that what may be a harmless remedy for one person may be a poison for another.

It is well known that a woman's pride as well as her purse are easily appealed to through her inordinate desire to follow fashion's decree. This has been evidenced in recent years in the craze for slimness. What crimes have been committed in its name! What a price women are paying for

this one phase of beauty culture and fad or fashion! Who of us does not know of one or more persons who have become either mental or physical wrecks as a result of efforts to slenderize without medical supervision. In most cases these sad plights have been brought about by some one undertaking to reduce by hearsay methods or ill-advised diets, perhaps by fasting, doing without food for long periods, or eating only one or two meals a day, when they have been accustomed to three.

However, not all the desires on the part of women to reduce are mere whims. Some need to reduce for their health's sake as well as for fashion's sake. Obesity can be as much a menace to health as thinness. Overweight can put a strain on the heart, or predispose to diabetes or other organic diseases, as surely as underweight can predispose to tuberculosis, colds, pneumonia, and other respiratory diseases.

But what every woman should know is that there is a right way to reduce. When she feels the necessity or the urge, she should ask herself the question, not "how shall I do it?" but, first, "do I really need to reduce?" If her weight is normal for her age, sex, race, physique and bodily activity, she should make no attempt to change it. If, however, she insists on reducing, she should first have a careful medical examination in which racial and hereditary characteristics as well as the general state of her health are taken into account. She should proceed only under the direction of her physician. She should remember also that in any sane reducing system the procedure should be gradual, losing not more than one or two pounds a week. Anything more drastic than this is likely to weaken the system, predispose the body to disease and cause mental upsets.

Since prevention is the basis on which progress for the most part in public health work has been made, the wiser plan, it seems, would be to prevent the necessity for reducing. Overweight and obesity are almost always the direct result of dietary indiscretions, mainly overeating, therefore the correct procedure would be to diminish the intake of food, taking care, however, to eat nourishing foods in sufficient quantities to provide a maintenance diet.

The person who habitually eats more than the body requires for its energy needs will store up the excess in the form of fat. A low caloric diet consisting mainly of the protective foods such as milk and dairy products, fruits, eggs, green and yellow vegetables and whole wheat cereals, will supply vitamins and minerals in abundance and will protect the body against dietary inefficiencies.

There are several insurance companies, we are told, who, in order to combat the evils of stringent and ill-advised dieting among their policyholders, have launched a campaign against drastic reducing diets and measures. To send home the lesson of the dangers involved in reducing too vigorously or without the advice of a physician, they have adopted two slogans: "Better be fat than dead," and "Diet and die." These are extreme slogans, we will admit, but insurance companies care to take no chances on such great and unnecessary risks as those involved in drastic dieting.

New Compilation of Public Health Laws

For the first time in eleven years, we have completed the preparation of a new volume embracing the public health laws enacted up to and including those of the session of the General Assembly of 1935. This volume should be in all public libraries in the State, including school libraries.

The Anxiety Factor In Modern Life

(Extracts from a sermon by the Reverend P. D. Miller, Pastor First Presbyterian Church, Raleigh, N. C.)

"THIS expression, 'anxiety factor,' was used in an address before a recent meeting of the British Medical Society. The speaker employed it in an effort to describe what the unsettling features of modern life have done to the mind of our day. I discovered only a passing reference to the address in a British magazine, but the term is so suggestive that one could wish for a chance to see the entire speech. Certainly no one who observes the contemporary scene can escape the fact that there is an anxiety factor present and prominent in our modern life. Not only is such a factor present but, according to this eminent authority, it has become a very demon, harrying our health and destroying our peace.

"Let us look at the matter for a little this morning and consider:

"I. THE APPARENT CAUSE.

"What is the cause of all this anxiety and uneasiness of mind in the modern world? Are we able to name some of the unsettling features which are combining to work havoc to health and happiness among us today? They are so familiar that the very naming of a few examples will be sufficient.

"1. *Political insecurity.* A sense of political insecurity hangs over hundreds of millions of modern men. Ancient thrones have toppled, old boundaries have been changed, governmental liberalism has given way to absolutism in many places, hitherto respected nations are spilling their own best blood to perpetuate political and economic ideals, fools who are drunk with power rattle their swords and threaten almost daily to strike matches in the powder magazine that is modern Europe. War clouds hang low both

East and West, while the only thing that holds off conflict seems to be the fact that America is not quite ready yet to pay the bill. And such political insecurity takes on a terribly sombre hue for a hundred million able-bodied men and boys who are fully aware that one fumble in this game of fools may send any or all of them to rot out their lives on some bloody battlefield—for God knows what. This cause of anxiety has not been so prominent here as in some other parts of the world. Nevertheless it is present in some degree among all men of our day.

"2. *Economic insecurity.* Doubtless you have already anticipated that I would name economic insecurity next. So far as disastrous effect is concerned it belongs first. Men's minds are deeply disturbed when they do not know where tomorrow's bread will come from. If we have seen the stark and ugly consequences of that here in a land of plenty, what is one to imagine about its effects in other parts of the world. Every pastor and every doctor could write a book on the sickness he has seen in recent years that was the direct result of fear from economic insecurity. We are not concerned to deal here with the causes of the economic situation—they are occupying the best minds of our day—but only to note the fact that here is the apparent ground of most of the anxiety in our land, if not in the world itself.

"3. *Anxiety arising from rapid tempo of daily life.* We live at a rapid pace and must carry in our minds a multitude of things. Consider the number of conferences a business or professional man must attend in one week and compare his pace with the

deliberate movement of other days. Consider the number of social engagements men and women both keep and compare the pace with less hectic days that are past. Consider the multiplicity of interests and the pressure of duties upon a body like our present Legislature that must provide for the annual raising and spending of 65 million dollars through all the complex machinery of a modern state, and compare it with a similar body of thirty years ago which thought two million dollars was a stupendous sum of money. We live at a rapid pace and consequently face the danger of death every time we cross a street or drive on a public road. We live at a rapid pace that makes enough noise to run a man crazy if he hadn't gradually adjusted himself to it. Nor is it possible to escape the mental wear and tear consequent to such a pace. It keeps us unsettled, and, combined with these other things, produces the anxiety factor which undoubtedly accounts for the particular kind of ailments from which we suffer—notably, nervous disorders and heart troubles in middle life. This eminent authority before the British Medical Association felt that fear was at the base of many ailments which afflict us today, and with his contention I suspect the American doctors would fully agree.

"II. THE FUNDAMENTAL CAUSE.

Now I believe every word that has been said about the causes back of this anxiety factor so prominent in

our life. Moreover, I am intensely interested in the solution of these in every area we have discussed. The social betterment of humanity is a passion of my life. It is a splendid crusade which every Christian man should aid wherever it breathes the spirit of Christ. And it does breathe the spirit of Christ.

But I am asking myself, if these problems were solved would we be rid of the anxiety factor? Is it that simple? Is it peculiarly modern at all? Is it really based on fear of human foes or fear that food will fail? I conclude that it is not so because Jesus found it already here 2,000 years ago—even in primitive Palestine. According to Him the final fear of the human heart is caused by deep unsettlements which have afflicted man from the beginning and always will afflict him until he individually makes his peace with God. We modern men do not recognize this as the fundamental cause of our mental unrest—and there is my quarrel, if I have one, with our theology and our philanthropy. It may be true, however, that fear in the realm of the soul is fundamentally the thing that harasses us even if we do not recognize it. A man can diagnose his own disease a dozen times and miss it entirely. Especially can this be true when he does not want to believe he is really sick. And I suspect this modern world does not want to believe that its basic trouble is spiritual."

A New Kind of Sit Down Strike

Some time ago from far up in Wa-tauga County the parents of a little eleven-year-old boy suffering from a good bit of deformity in his feet took this boy to one of the Crippled Children Clinics in Lenoir. The parents were advised to take the child to a

hospital for surgical correction. The child spent one night in the hospital. The mother was reported as very hysterical, the family spent a miserable night, and the next morning the father took the child home without the operation.

Just a few weeks later the boy reported to the clinic again. When the parents got him back home he absolutely refused to go to school until his parents consented to have the operation done, and he stuck it out. The authorization papers were again sent to the hospital, along with the determined young chap, and we hope and believe that the operation will be successful and that the child's deformity may be practically eliminated in due time. This kind of a sit-down strike indicates the youngster has something in his makeup that every eleven-year-old boy does not possess. Our manners to him, with the hope that success may ride with him from now on.

The Summer Roundup of Pre-School Children

The months of April, May, and June are the most important months in the year in which to hold the examinations for pre-school children expected to enter schools at the opening this fall. These examinations should be thoroughly done by competent physicians, and a dentist should advise about teeth conditions. The Parent-Teacher organization has aided mightily in systematizing this work during the past few years. All the nurses in the State Board of Health organization have been requested to spend as much time as possible in carrying out the plans this year.

DEATHS (Exclusive of Stillbirths) UNDER ONE YEAR OF AGE PER 1,000 LIVE BIRTHS

AREA	1935	AREA	1935
Birth Registration Area.....	55.7	Montana	60.0
Alabama	62.8	Nebraska	41.2
Arizona	111.7	Nevada	71.0
Arkansas	47.1	New Hampshire	53.9
California	49.6	New Jersey	46.2
Colorado	72.7	New Mexico	129.3
Connecticut	42.7	New York	48.0
Delaware	66.4	North Carolina	68.8
District of Columbia	59.4	North Dakota	59.4
Florida	61.9	Ohio	50.4
Georgia	68.3	Oklahoma	54.6
Idaho	51.0	Oregon	41.2
Illinois	45.9	Pennsylvania	50.8
Indiana	50.8	Rhode Island	47.2
Iowa	47.1	South Carolina	79.3
Kansas	50.3	South Dakota	52.5
Kentucky	58.7	Tennessee	64.0
Louisiana	69.4	Texas	71.7
Maine	63.0	Utah	49.3
Maryland	62.0	Vermont	48.6
Massachusetts	48.3	Virginia	69.6
Michigan	47.7	Washington	45.2
Minnesota	44.7	West Virginia	60.6
Mississippi	53.9	Wisconsin	46.0
Missouri	56.9	Wyoming	51.1



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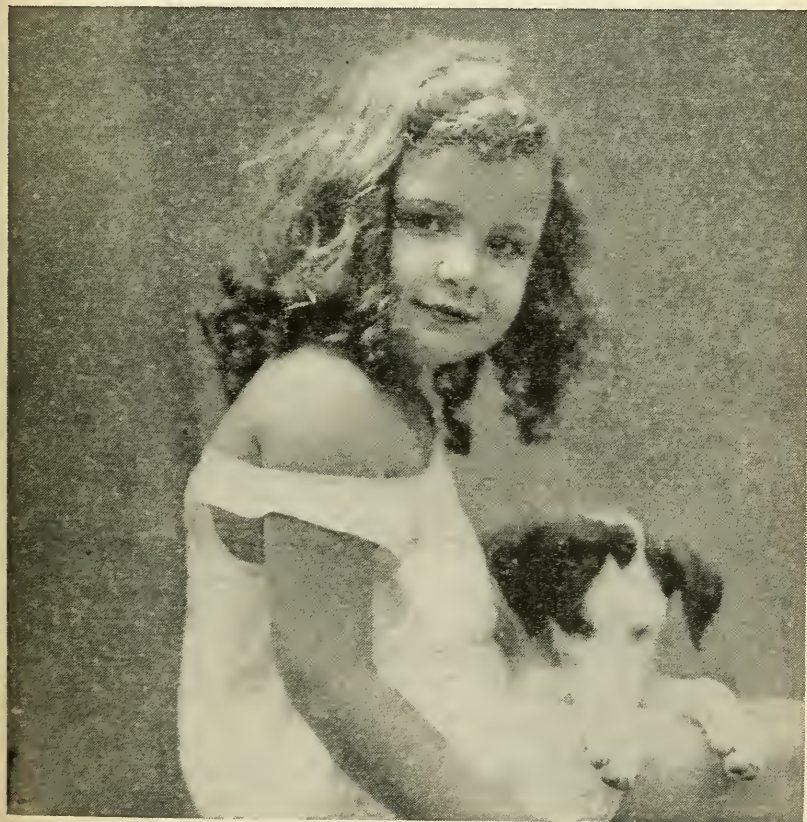
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MAY, 1937

No. 5



HILDA SHARKEY, Chapel Hill, N. C.

Age 7, weight 70 pounds, height 52 inches. Third grade at school. Physical examination score by school physician 100. Still takes cod liver oil and sleeps 12 hours every night. Please turn to page 12 and see the interesting sketch about this child.

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FREE HEALTH LITERATURE

The State Board of Health publishes monthly **THE HEALTH BULLETIN**, which will be sent free to any citizen requesting it. The Board also has available for distribution without charge special literature on the following subjects. Ask for any in which you may be interested.

Adenoids and Tonsils	German Measles	Scarlet Fever
Cancer	Health Education	Smallpox
Constipation	Hookworm Disease	Teeth
Chickenpox	Infantile Paralysis	Tuberculosis
Diabetes	Influenza	Tuberculosis Placards
Diphtheria	Malaria	Typhoid Fever
Don't Spit Placards	Measles	Typhoid Placards
Eyes	Pellagra	Venereal Diseases
Flies	Residential Sewage	Water Supplies
Fly Placards	Disposal Plants	Whooping Cough
	Sanitary Privies	

SPECIAL LITERATURE ON MATERNITY AND INFANCY

The following special literature on the subjects listed below will be sent free to any citizen of the State on request to the State Board of Health, Raleigh, N. C.

Prenatal Care (by Mrs. Max West)	Baby's Daily Time Cards: Under 5 months;
Prenatal Letters (series of nine monthly letters)	5 to 6 months; 7, 8, and 9 months; 10
Minimum Standards of Prenatal Care	11, and 12 months; 1 year to 19 months
Breast Feeding	19 months to 2 years.
Infant Care. The Prevention of	Diet List: 9 to 12 months; 12 to 15
Infantile Diarrhea	months; 15 to 24 months; 2 to 3
Table of Heights and Weights	years; 3 to 6 years.
	Instructions for North Carolina Midwives.

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THE Health Bulletin



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Vol. 52

MAY, 1937

No. 5

Notes and Comment

By THE EDITOR

JUST before closing time in an afternoon in March at one of the large consolidated schools in the State of Texas, an explosion occurred without warning which instantly killed 455 children and teachers. This was one of the most horrible accidents that has occurred in the United States in a long time. Every newspaper in every civilized country on the face of the earth carried the news in great headlines, telling their readers of the disaster. The heads of many foreign governments telegraphed condolence to the officials of this country. As these lines are written, the authorities have not yet arrived at a definite conclusion about what caused the accident. Some of the investigators have one opinion, and some another. As we get the situation from this distance, it seems to be a case in which it is hard to discover the facts as to the exact cause. In other words, it may have been strictly preventable or, as no accident of the kind had ever occurred before to offer warning in construction and maintenance of the building, it might have been an accident which could not have been prevented.

We do not like to moralize and to draw comparisons in such matters. It has been a custom that has been overplayed, but it seems to us that we are fully justified in one more time drawing a parallel, and you have probably already guessed what we are going to say. Anyhow, in 1936 5,184 babies

under one year of age died in the State of North Carolina. A conservative estimate concerning the cause of these deaths would be that fully 60 per cent, or more than 3,000 of them, were strictly and easily preventable, could they have had the benefit of ordinary intelligent care and the protection which all babies should have available to them in civilized countries today. Some of our doctors and many of our people think that we have had too much to say and that there have been too many headlines and too many newspaper comments on these needless deaths. We do not think so. These deaths were due to poverty and to ignorance and to carelessness. Many of them were born into families already too crowded with children for them to be able to have the care that is necessary for any baby to survive. Many of them were prematurely born and, therefore, did not have a chance when their surroundings were considered. A few of them were born with inherited disease and death was their only way out. Quite a number of them received injuries at birth from which they succumbed. The mothers of a good many of them had no medical care during their expectancy period and no attention at the time of the birth of the babies except that which could be given by a woman historically known as a midwife. Some of these babies died from summer diarrheas, which almost invariably follow the

giving of polluted water or dirty raw milk. Some of them succumbed to heat in the hot summer months, especially when unprotected from flies and mosquitoes. Some of them died from exposure to cold and the lack of proper heating facilities in the homes. Quite a few of them succumbed to one of the various communicable diseases such as measles and whooping cough, scarlet fever, and diphtheria. Some of them died as a result of pure neglect. Every one of the aforementioned causes may be listed as preventable. It seems strange that in a civilized and enlightened country that people can get wrought up over a spectacular horror, but can be complacent and indifferent to equally fatal conditions going on all around them every day.

Let us hope that the time will some time come when a baby's death from a preventable cause in any community will arouse the sympathies of that community just as much as an accident happening to children in any far-off state.

* * *

THOUSANDS of visitors from all sections of the country pass through North Carolina every month in the year. A majority of them get the kind of accommodation for which they are willing to pay when they are overnight guests, that is, they generally get about what they are able and willing to pay for. We do not know how many hotel beds there are available in North Carolina, that is, beds in first-class hotels where the occupant is safe and comfortable and has all the conveniences for which money can pay for, but there must be many thousands of such hotel and boarding house rooms. In such places, the food is good and the patron goes away satisfied after a restful night, or a week, as the case may be.

The State Board of Health never receives a letter from any of these thou-

sands of satisfied visitors, but it does receive letters practically every week from visitors who happen to get into places that are not clean, where the food is of poor quality and badly prepared. Such letters are generally bitter and invariably every one of them feel that they have been robbed of their money. We think their complaint is just. The State Board of Health and the various city and county health divisions have done a great deal toward cleaning up such places during the past few years, but many places still exist which have not yet been cleaned up or closed up.

The inspectors sent out by the State Board of Health are not the enemies of the people of the State. They are friends of the people. They are friends of the traveling public. They are helping the boarding houses, hotels, cafes, and restaurants to build good will for themselves. These inspectors should be welcome and their advice should be followed, as it invariably means fewer filth-borne diseases and protection from even death in some cases.

The other day the State Board of Health received a letter from an intelligent traveling man. The man signed his name and gave his home address, which is one of the smaller cities in Ohio. He stated that he came up through North Carolina, entered a tourist home about midnight. This home had the electric lights shining, it was out on one of the large highways, had their advertising board out front, and there was some one on night duty up waiting for any late guests. This man writes that he went to bed about one o'clock, but the odors and general filth of the room was so bad he could not go to sleep. Presently, he said, things started crawling on him, and in switching on the light he found the bed covered with bedbugs. Naturally, he got out and made complaint. The owner of the tourist home

offered no apologies for the dirty, messy, condition. The owner had taken this man's money in advance, would not refund it, would make no effort to try to rearrange things for his comfort. He was forced to get out, get back in his car at three o'clock in the morning, and go out on a dangerous highway at a time of night when driving was none too safe. He wrote us from a point in an adjoining state, the first stop that he could make for suitable accommodations.

Now, we know the reader will say that this man should have gone to a first-class hotel. Many people do not have money enough to pay the prices hotels are compelled to charge for the service they render, and, another thing, in the month of March practically every first-class hotel in North Carolina was turning away guests before six o'clock every evening. Wherever this man goes in his travels he will have a bitter feeling toward the State of North Carolina and everybody in it. The action of the State Board of Health in this case was to request the local health officer of that town and county to clean this place up or close it up at once. We do not have a report yet, but the chances are that the place is run by some widow. This is perhaps her only method of making a living. Her rooms have been infected by travelers who have been none too clean, and she will probably offer many explanations as to why the situation was just what it was at that particular time.

Our suggestion is that people who are going to take in transients should first be thoroughly prepared for entertaining them, and they should satisfy themselves that the transients taken in are decent orderly people who will not infect them or their premises and who will be able to give value received for their accommodation, a clean place with a comfortable bed,

accessible bath and toilet facilities which are kept clean and free from odors. The food may be simple, but if it is of good quality and well prepared, these things will make an impression on a traveler and returns to the host will be coming in from unexpected quarters for a long time after.

* * *

WE do not want to tire our readers with too much along the lines of the foregoing paragraph, but as May is the season of the year when summer comes on and our own folks work harder and travel more about the State than any other season, we do want to set forth one more illustration.

Some weeks ago the editor received accidentally a compliment which made him very proud and at the same time very humble, so humble, in fact, that he worried for several days on account of the fact that it was a situation which he could do nothing about, except in the way that he is undertaking right here. Briefly speaking, the editor's wife one afternoon along in January happened to be in the rest room of one of the largest dry goods and ladies furnishing stores in Raleigh. The rest room of these stores is provided at the expense of the management, of course, and it is provided for the comfort of the visiting customers, particularly from out of town. It is a room in which the women can bring their children when in town.

This particular day had been a busy one for the store, and there had been many visitors and many customers, and naturally the rest room had suffered the consequences. It was in a dirty, bedraggled condition, not at all worthy of the great store which maintained it. Among the several women present, one woman who stated that she was from a small town in an adjoining county, the citizens of which traded a great deal in this store and

other places in Raleigh, was making bitter complaint. Finally she burst out with the following: "I do wish somebody would tell Dr. Cooper of the State Board of Health about this mess. I feel sure he would clean it up." The editor's wife said nothing, of course. There was nothing that she could say, but she did tell the old man about it that night, and, as stated in the beginning, it gave him considerable worry. Within a day or two he made it his business to repeat the conversation to an inspector of the State Labor Department. This young man readily commented: "Why, that is all known to us, not only in that store and other stores in this town, but in stores of equal reputation in other larger cities in this State; and, furthermore," says

this young inspector, "if the cotton mills out here did not provide cleaner rest rooms than these stores provide for their customers we would shut the mill up in twenty-four hours."

Some time the management of the stores and such other public places, including filling stations, will realize that a little more time and money spent in providing clean rest places will mean larger dividends than, say, any kind of billboard advertising.

Incidentally, we hope we will not be run out of Raleigh on a rail with tar and feathers sticking about if we here and now repeat again that Raleigh needs a municipal "comfort" station and rest room for both sexes and races worse than it needs any other public convenience.

On the Importance of Immunization

By THOMAS C. WORTH, M.D.

DURING the month of May special emphasis is always placed on the subject of child hygiene. Of primary importance for the safety and health of every child is to insure him protection against diphtheria, smallpox and typhoid fever. Such protection is known as immunization and is obtained by vaccination. It is by immunization that countless babies can be saved, using a simple harmless procedure to avoid a disabling or even fatal disease. Its uses have been extended to other diseases, but for practical public health purposes, the most important are those mentioned above.

When a child dies from an obscure or baffling disease, the medical profession and public are often helpless to do much about it, but when we see a disease occurring in young children,

sometimes causing tragic death, and that disease happens to be one for which medical science offers a preventive measure, we realize that more must be said about immunization. When a *preventable* disease such as diphtheria continues to thrive among us, there is a defect somewhere in our system, a fault that will only be corrected in the light of public health education and passage of much more progressive public health laws. Immunization must be taught; if necessary it should be forced. Religion or personal feelings should have no influence on the make-up of such laws. It is not an imposition on a man's personal liberty to force him to have his child vaccinated, for a case of smallpox or diphtheria is a *public menace* rather than a private misfortune. A contagious disease that could have

been prevented is, in reality a result of neglect of public duty, and furnishes a source of danger to the community.

Failure of the recent compulsory vaccination bill in our Legislature shows that, for the present at least, health education must be used instead of force. We can begin right now on the subject of diphtheria. The product most used in its prevention is Alum Precipitated Toxoid (toks'oid). Between 85 and 90 per cent of all children are protected by one injection of this material. To be absolutely sure, a Schick Test should be done after three months; if the test is positive, the child is not protected and should receive a second dose; if negative, he is protected, probably for life. Toxoid can be given safely at the same time smallpox vaccine is administered. Toxoid will not usually protect a child who has already been exposed to diphtheria. Above all, and this point should be particularly stressed, the child should receive this injection between the ages of six months and one year. A new-born infant is protected for six months by special substances received from its mother, but after this time he is susceptible unless he is immunized. Toxoid is not only tolerated better by infants and younger children, but is most needed and is most effective in this same age group. We cannot too strongly urge all mothers to have their children vaccinated against diphtheria *as soon as possible after the age of six months*. It is the wisest investment she can make.

It is hard to realize today that there are still many school children in North Carolina who come with their tablets and pencils, but without a smallpox vaccination scar. It is a duty that has been sorely neglected by public officials in some communities. Smallpox vaccination has been known for one hundred and forty years, for Edward

Jenner in 1796 first demonstrated the protective qualities of material obtained from cows infected with cowpox. The modern type of smallpox generally seems less severe than older cases, with the result that the present generation has not seen as many or as virulent types; they have not seen the terrible scars left on the few who escaped death. Probably due to these reasons, they have become lax in their efforts to obtain protection for their children. Smallpox, however, has not been fully wiped out. It has been merely held in check, and unless great care is taken it may be with us again. There is no natural protection against smallpox; there is, however, a very simple way to obtain such protection—by vaccination. The best time to vaccinate a child is during his first year, preferably around his first birthday. Vaccination has never been known to harm a child who was immunized during his first year. Following such vaccination, protection is complete for one year; afterwards gradually declining. A certain amount of protection, however, lasts for life. A safe general rule is to have a child vaccinated at the age of one year, then revaccinated before he enters school, and again revaccinated if he is exposed to a case or if an epidemic prevails. The best season to vaccinate is winter, because the child tolerates it better and smallpox is generally more widespread at this time.

Due to development of better sanitary facilities most child specialists do not recommend that infants or children under five years of age receive typhoid vaccination. Between the ages of five and eight years a child should receive one-half of the adult dose. After eight years he is ready for a full dose, consisting of three injections. He should be revaccinated every three years, or in case of disaster, such

as the recent floods in the Ohio and Mississippi valleys, or anything that interferes with proper sanitation. Full protection is developed three months after vaccination.

Protection against these three diseases is not a matter of guess work. Every child should receive the benefits of these procedures. It should be emphasized that there are occasional cases which do not react with the full degree of protection. One is never justified in failing to observe all cautions against these diseases even though the child has just been immunized. The fact that a child is vaccinated against diphtheria does not mean that he can be wilfully exposed to the disease, for this protection is known as "relative" protection; that is, it is immunity that will protect him only against the usual amount of exposure. No method of immunization is absolutely infallible, but it is still the most satisfactory and powerful weapon against these diseases.

Protection against other diseases is now used by many child specialists

and physicians. As is well known, whooping cough is most deadly to a child under one year of age. A vaccine has been developed and is used by many, but has not been accepted widely enough to justify its adoption in public health work. It is a commonly accepted fact that we are often able to lessen the severity of measles by giving a child, at the right time, a small amount of blood from a grown person. A vaccine against tuberculosis has been developed, but is not widely used in America.

Experimental work continues to go forward with immunization for many diseases. It seems logical for us to take full advantage of the knowledge we already have, and adopt new procedures only after they have been fully tried. During the month of May, when we are thinking particularly about child health, and throughout the year, it is the duty of every citizen of this State who knows a child unprotected against smallpox, diphtheria or typhoid to find out the reason and see that he receives the safety he so justly deserves.

For the Mothers of the Poor

A LITTLE more than one year ago this department was notified that Federal funds through the United States Children's Bureau under the Social Security Act would be available for work in North Carolina as soon as the plan of execution which had been submitted by the department was approved. The approval came on April 4, and since that time the Department of Maternal and Child Health Services, exclusive of the large amount of work done by the Division of County Health Work, operating with funds through State aid appro-

priated by the Legislature and from funds received under the Social Security Act from the United States Public Health Service, has put into effect new work in about forty different counties. The program may be said to be chiefly educational. Teaching Negro parents only a generation or so up out of slavery how to produce healthy children and to care for them during the first few months and years is a task requiring time and patience. The very same observation also applies to the class of white people who were practically in serfdom

up to the time of the so-called Civil War, and who have for the most part not been in much better shape since. North Carolina, as we all know, is a State having some exceedingly wealthy people, but a large number are very poor people. Our program of good roads and schoolhouse building is not much older than our program of public health work. All of these enterprises, so to speak, in our State are in their infancy. The State has always had a high birth rate. This fact, when taken in connection with poverty and ignorance, has naturally conduced to a large loss of infant and maternal life. With such a background as this the department has planned work to combat these conditions to extend over a long period of years, an educational program that will slowly teach by precept and example the fundamentals necessary to good health.

In order to make the objectives clear and to have something definite to work toward, we have established what we term Maternity and Infancy Health Centers. Clinic might be another name for it, conference still another, but the chief objective is to have a place within reach of the expectant mothers where they can come once a month and receive a medical examination and advice from the physician and the nurse in charge and literature provided by the State Board of Health which will help them in many ways. At the same place, babies of such women may be brought for an examination and for advice to their mothers as to how to keep them well. It is not a place for sick babies. No treatment of any kind is given at these Centers. They are prescribed for and they are given advice which is generally easy to follow, and frequently means the difference between death and life for the recipients. These people are drawn from the

class who do not have family physicians, who never consult a doctor until they are generally too sick to be helped much, that is, during their expectant period, and who depend on midwives for the most dangerous service in a woman's life. When one of these helpless women comes to one of the Centers now being operated in forty different counties at more than 100 different places, she is given a careful examination by a competent practicing physician of the community who is engaged for the service. Her blood pressure is secured, measurements are taken, a urinalysis is made, a medical history is carefully ascertained. All of this is done in an effort to discover any condition that might cost her her life or the life of her baby which could be prevented by proper medical attention. One of the most important features is to secure a specimen of blood for laboratory examination to ascertain whether or not she has syphilis. So far, since the operation of the Centers were inaugurated last summer, 3,945 women have had blood examinations made. About 12 per cent of them have been found infected with syphilis, most of them at a time when treatment could be instituted and which not only saved their lives but assured the birth of healthy babies. Treatment is carried out through co-operation with the welfare officers, medical societies, and the county health departments in the localities where they live.

Naturally the work is just being organized and a beginning is just being made. It will require several years of intensive effort with infinite patience and perseverance on the part of the State Board of Health officials and the co-operation of the public before much tangible progress can be made.

Planning the Baby's Happiness

By ROY NORTON, M.D., *Assistant Director*
Division of Preventive Medicine, State Board of Health

MANY factors are important in the proper development of every child. Every parent wants his or her child to have the best possible opportunities to grow into a happy and useful citizen. Too often we may be inclined to think that the child born to inherit great financial wealth is the luckiest. This is not necessarily so. It is of far greater importance to be born of healthy parents (physically, mentally, spiritually healthy), be breast fed the first nine months of life, and be reared in a good home by normal, intelligent parents. In no phase of our thinking is it more important to have an appreciation of relative values than in the parents' planning for the future well-being of the infant intrusted to their care.

It is said that the mother of a four-year-old boy went to Socrates, inquiring whether it were still too early to begin training the little fellow along the proper lines. She was told that the proper time to begin is when the child's grandparents are selected.

In recent years we have come to appreciate more fully the fundamental importance of planning for the arrival of the baby before his birth. We have complacently and proudly referred to our "bumper baby crop" since for many years North Carolina has held the record of a higher birth rate than most other states. We have made marriage and procreation easy, even among those unlikely to transmit a sound heredity to their offspring. Hereditary disease, defects and incompetence have been fostered at community expense. Many pregnancies which should never have occurred have resulted in illegitimacy, abortion and infanticide. Our maternal, neonatal

(first two weeks of life) and infant (first year of life) mortality rates have been and still are disgracefully high. Fortunately more thought is now being given to selection, cultivation and bringing to profitable (in individual happiness and community resources) harvest our crop of human offspring.

Parenthood is a privilege and a responsibility. Adequate pre-natal and competent obstetric care are essential. Among the things a mother can do for her child few, if any, are of more importance than breast feeding for as much as the first eight or nine months as possible. Of course, cod liver oil, orange juice and supplementary feedings are added at proper intervals during this period.

It is important to keep the baby under competent medical supervision. By regular check-ups the physician can give advice to keep the baby well, developing normally and, in many cases, prevent illnesses. In this issue, Doctor Worth discusses some of the immunization procedures available and the best time for making use of them. It cannot be emphasized too strongly that delay may be fatal. All infectious (contagious) diseases are much more easily prevented than cured. This is particularly true of colds, smallpox, diphtheria, typhoid, measles, whooping cough, ophthalmia neonatorum (new-born babies' sore eyes), and congenital syphilis. By proper advice the physician, through health supervision of the infant, can help to prevent constipation, digestive upsets, scurvy, goiter, rickets and anemia. Too often parents are impressed with the cost of such preventive medical care by their physician because they are not fully in-

formed or have not taken careful thought of the vast benefits received. If one considers, however, the extreme costliness of a long illness or a funeral bill, one then realizes that prevention is a good investment. Then, too, it is so much easier to prevent these expenditures together with the unhappiness and suffering that go along with illness where one is dealing with little children.

When one looks at our accident mortality tables he is impressed by the fact that preventable accidents still claim too many babies and little children. Burns from stoves, open fires, gas or electric heaters or chemicals, such as lye are common. Asphyxiation by illuminating gas may result from a child's investigative tendency where there are carelessly arranged fixtures. Bottles of medicines and boxes of pills should be placed on high shelves because of the baby's "hand-to-mouth" instinct. Just a little forethought in consideration of accident prevention may avoid a tragic catastrophe.

Much thought has been given to housing conditions in recent years. Slum areas are our chief foci of disease, incompetence and crime. They are community liabilities and contribute largely to a high tax rate. It is much cheaper to provide satisfactory housing conditions. Maintenance of poor housing conditions is costly to the community; it should be made unprofitable to the individual property owners. It is of special importance that babies live in satisfactory houses and surroundings with available fresh air, sunlight, warmth and proper humidity, adequate screening, general cleanliness and special attention to proper disposal of human wastes. The baby should have an opportunity to play safely and should have a separate bed.

Clothing should be adequate, but the tendency more often is to have too much. It should be kept reasonably, but not too, clean and spotless. Regular bathing with special care of the eyes, ears, mouth, nose and genitalia is important in the health and training of the child.

Dental development begins at least six months before birth, and hence it is important for the prospective and also the lactating mother to have a thoroughly nutritious and balanced diet. Good care of the deciduous or "milk" teeth is important because, if these are lost too soon, the permanent set are likely to be unhealthy and irregular. Dry hard toast may be given at about seven or eight months of age and helps to develop strong healthy teeth, gums and jaws.

A very young baby sleeps twenty to twenty-two hours a day and then less and less with increasing age. A definite schedule for sleeping is helpful to both mother and child. A reasonably quiet, slightly darkened room should be available for baby's daytime naps, but tiptoeing and whispering should not be practiced because it is easy to become accustomed to sleep through ordinary household noises. "Sleeping medicines" should not be used. Never take up baby to "show off" to visitors nor allow sniffing and coughing children (and adults) near him.

Regularity in feeding is equal in importance to having a definite and undisturbed rest schedule. With the same thing done at the same time each day, the baby's bodily processes will function with maximum efficiency. With equal intervals between feedings, such as with a four-hour schedule, there is less tax on the digestive system and the food is more satisfactorily digested. Even though most schedules run 6-10-2-6, it is equally acceptable to feed at 7-11-3-7 or at any

other four-hour periods which may fit in best with the family routine just so the regularity is maintained. Breast feeding starts the baby off right and it is essential to see that supplementary feedings are kept scrupulously free of contamination. Milk should be pasteurized or boiled. After milk is received in sealed bottles, it should be handled in an absolutely cleanly manner and kept cold. Harmful bacteria do not multiply at low temperatures. Diarrheas and intestinal diseases are caused largely by feeding contaminated milk or water. The former high sickness and death rates of the baby's second summer have been reduced chiefly through proper care in making sure that baby's food and drink are clean.

Mothers worry greatly about baby's constipation. Diarrhea is much more serious and requires the prompt advice and care of the physician. Regularity, balanced diet, exercise, and sufficient fluids will usually correct constipation. Do not give laxatives, purgatives or cathartics, no matter who says that they are harmless; they only aggravate the tendency to sluggish bowel elimination. Occasional use of a small suppository, carefully fashioned from pure soap and wet in warm water before insertion may be permissible. If the infant develops a "tummy-ache" it is even more dangerous to risk giving a laxative as an inflamed appendix may thereby be caused to rupture. Even some who should know much better continue to

give laxatives promiscuously and keep our deaths from the complications of appendicitis at a disgracefully high level. Almost every day we read "—, small son (or daughter) of Mr. and Mrs. —, died from appendicitis operation." It would be far more accurate to say "— died from purgation," for, as Doctor Hubert Royster says, these deaths can be attributed to "purgation, procrastination and peritonitis."

We do not appreciate sunlight as much as we should. When we consider how essential in our lives the sun is we do not wonder that many peoples have been sun-worshippers. Sunlight enables baby to utilize food for proper development, especially in the growth of bones. In warm weather, beginning sun baths are best given when the rays are less intense in the morning or late afternoon, rather than between 10 a. m. and 3 p. m. Expose the whole body for only about five minutes the first day—always with eyes protected. The period of time may be lengthened three minutes each day till the sun baths last a half hour each morning and afternoon. Even in early spring, late fall and on certain days in winter the beneficial effect of sunlight may be utilized.

If parents occasionally remind themselves that baby's life is to be planned toward his present and future health and happiness rather than to satisfy their or occasional visitors' whims and desire for amusement, a reasonable basis for progress will have been attained.

Our Front Cover This Month

IN our opinion, we are not only publishing one of the most beautiful photographs that has ever appeared in THE HEALTH BULLETIN on our front cover this month, but the manner in which this child is being reared has a number of lessons for every parent

in North Carolina. We have a large number of readers who frequently write us that they have been constant readers of THE HEALTH BULLETIN for many years. To these and others we would like to recall that we published a photograph of Hilda on the front

cover of THE HEALTH BULLETIN for July, 1931. The caption we placed over the picture was "An Optimal Child." That is what her foster mother called her. The photograph then was taken when Hilda was nineteen months old, so now, about six years later, we take pleasure in publishing her photograph showing the natural growth and development of a child who is born healthy and being reared intelligently. This child's foster mother, Miss Josephine Sharkey, of Chapel Hill, adopted the baby when she was four weeks old.

The Editor of THE HEALTH BULLETIN was invited to visit the third grade in the Chapel Hill school a few weeks ago. Without a doubt this grade is an unusual group. In the first place, the teacher, Miss Clyde Wright, is a young lady who has grown up steeped in the traditions of public health work, and she is putting into practice the fundamental principles so necessary to the healthy development of growing children. In the second place, the grade mother this year is Miss Josephine Sharkey, and Miss Sharkey is not one of the sitdown kind of grade mothers.

The group of about forty children run the social and intellectual scale. Some of the children come from the tenant farms outside the village of Chapel Hill. Some of them are the children of faculty members of the University. It is a cosmopolitan group. The first thing Miss Sharkey did as grade mother was to visit the homes of every child outside of the village and many of those inside, and they have the practical co-operation of the parents of the children in this grade in their various studies of health projects, and their special project this year is health.

We are now going to let Miss Sharkey do some of the talking in finishing this article. We will first quote Miss

Sharkey about her work as a grade mother.

"We are only in the midst of our health project and there will be a lot more developments before we get through. The children are still making up poems and next thing we know we will have a lot of songs, too, because words stick better with music. We hope to have the May meeting of the PTA given to us. We would have preferred the April meeting, but they have scheduled that for an evening meeting with a lecture by Dr. Groves, and of course we cannot keep our children up even to give their parents more health education. We are holding open house in our grade room, but it looks as if the room will not hold nearly all our exhibits. We will spill out over the halls and others, if need be. Besides the illustrated notebooks and posters prepared by the children, we will have trays of breakfast, dinner, and supper for children of various ages, with cost of the meals, which will bring in their arithmetic, spelling, and writing. We will give a program in the auditorium with every child taking part, and we will sing the health songs we have made up, together with the parents who are present."

It is Hilda, however, that we started to talk about here. Miss Sharkey quotes her physician as saying that her teeth will never cost anybody a penny. The glass of orange juice and quart of milk a day and the cod liver oil which she takes winter and summer will take care of that. Her doctor says she is normal, but, unfortunately for a lot of other children, she is not average.

"Since she has had an allowance she has spent exactly 10 cents on candy, and after eating three pieces of that gave it away. Of course, she has jelly, honey, or sorghum molasses on her toast in the morning or for sup-

per, but candy and cake does not interest her. She is weighed once a month because I think it is important to watch for those sudden spurts so as to provide extra rest and food to take care of them and to understand little periods of awkwardness when the muscles grow a bit faster than the co-ordination and little periods of so-called 'laziness' when we need extra rest to 'catch up.'

"We have mimosa trees to climb and a bar to chin, and on Saturdays, instead of going to the movies, she goes five miles out of town to a fine, scientific farm, where she enters into whatever work is on hand, plowing, sowing, cultivating, reaping, painting fences and milking cows. She can milk a cow, believe it or not. Of course, in this farm day she has a nap after dinner before going on with her work. I think it is good for town children to know the workings of a farm and to understand the contribution of the farmer to the community. She sees how the men wash their hands

and the cows' udders before milking, and protect the milk from dirt and dust; how the barns where milking is done are washed out before milking and kept fresh and clean and how the milk is quickly cooled. She helps in the silo and in weighing the supplementary food given the cows, sometimes slips in an extra handful or two for one of her favorite cows. This farm experience has been going on for four years now, since she was three years old, and only last week we had our first accident. She fell through the hayloft and had to have some stitches taken in her head where she hit a projecting board on the way down. Of course, we gave her the tetanus anti-toxin on account of its happening in a barn. One accident in four years is not a very high proportion and will not dampen our ardor for the farm. Much worse things might have happened to her all those Saturdays in town."

To try to add any comment to the above would be useless.

New Law to Aid in Control of Syphilis

THE enactment of the law requiring all domestic servants in North Carolina to be examined for the presence of syphilis or tuberculosis, which was passed by the 1937 General Assembly and ratified on March 22nd, was a distinct forward step for North Carolina in the control of these diseases. The North Carolina State Board of Health at this time is launching a campaign for the control of syphilis which it is hoped will be under way by July 1st.

This law requires that all domestic servants be examined at least once a year, or as often as the employer may desire. It is urged that employers do *not* discharge from service those individuals found to have positive Wasser-

mans, but rather insist that they place themselves at once under treatment by a reputable physician, and that they continue treatment until discharged as cured. In some instances it may be necessary that the servant be temporarily suspended from service for a period of three to six weeks, or until all open lesions are healed under treatment. After this period has passed, if treatment is continued without interruption, there is no danger of a servant with syphilis transmitting the disease to any member of the household by ordinary contact. The treatment of syphilis requires an extended period of time, at least eighteen months of continuous treatment for the average early case. The employer should re-

quire from the domestic servant under treatment a certificate from the treating physician given at the time of discharge, stating that such servant is cured of the disease.

Following is the law in full relating to the examination of domestic servants:

S. B. No. 380.

AN ACT REQUIRING THE EXAMINATION OF DOMESTIC SERVANTS.

The General Assembly of North Carolina do enact:

Section 1. That hereafter all domestic servants who shall present themselves for employment shall furnish their employer with a certificate from a practicing physician or the public health officer of the county in which they reside, certifying that they have been examined within two weeks prior to the time of said presentation of said certificate, that they are free from all contagious, infectious or communicable diseases, and showing the non-existence of any venereal disease which might be transmitted. Such certificate shall be accompanied by the original report from a laboratory approved by the State Board of Health for making

such tests showing that the Wasserman or any other approved tests of this nature are negative. Such tests to have been made within two weeks of the time of the presentation of such certificates, and such certificate shall also affirmatively state the non-existence of tuberculosis in the infectious state.

Section 2. That all domestic servants employed shall be examined at least once each year and as often as the employer may require, and upon examination shall furnish to the employer all of the evidence of the condition of their health as is set out in section one hereof.

Section 3. All laws and clauses of laws in conflict with this Act are hereby repealed.

Section 4. That this Act shall be in full force and effect from and after its ratification.

In the General Assembly read three times, and ratified this the 22nd day of March, 1937.

W. P. HORTON,
President of the Senate.

R. G. CHERRY,
*Speaker of the House
of Representatives.*

“Alamance and Health”

(Greensboro Record)

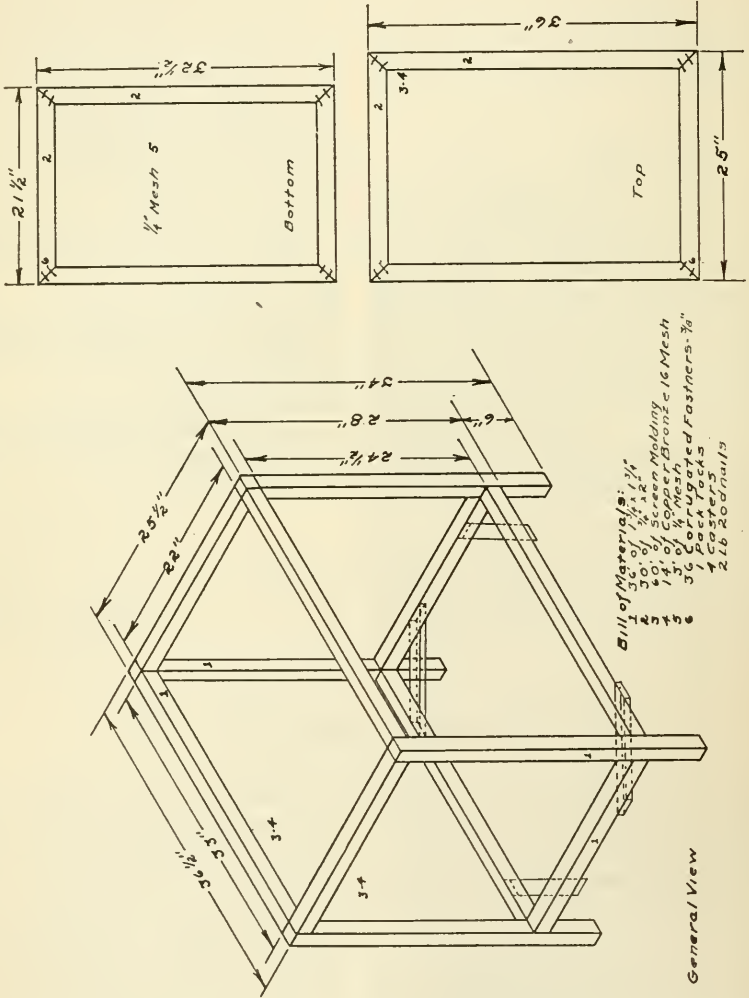
“The *Fayetteville Observer* expresses surprise upon learning ‘through the editorial columns of the estimable *Burlington Times-News* that Alamance County does not support a health department.’

“Well, we, too, are surprised. We had supposed that Guilford’s good neighbor to the east had—well, nearly everything.

“The *Observer* makes this pointed comment: ‘We had long considered

Alamance as one of the most progressive and enlightened counties of North Carolina. The Health Department as maintained in Cumberland (of which Fayetteville is the capital) has proved of inestimable value to the general public. Should Alamance install a health department we feel certain it will never have cause to regret it. A county without a health department is about as healthy as an individual who lets the medicine barker on the corner prescribe for what ails him.’”

Plans For An Economical And Hygienic Home Made Crib
Revised Of Orange-Person District Health Dept. Plans





The Health Bulletin

Published by THE NORTH CAROLINA STATE BOARD OF HEALTH

This Bulletin will be sent free to any citizen of the State upon request.

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JUNE, 1937

No. 6

ACTUAL SITE WHERE THE ENGLISH COLONY LANDED IN AMERICA IN 1587



In fitting tribute on the 350th anniversary of the founding of this colony and to honor on August 18th the 350th birthday of Virginia Dare, a series of celebrations will be staged between July 4th and September 4th on Roanoke Island at the exact site of the first English settlement in America. On August 18th, President Roosevelt will be present and speak to the multitudes gathering there in celebration of this, one of the most memorable events in the history of the new world.

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FREE HEALTH LITERATURE

The State Board of Health publishes monthly THE HEALTH BULLETIN, which will be sent free to any citizen requesting it. The Board also has available for distribution without charge special literature on the following subjects. Ask for any in which you may be interested.

Adenoids and Tonsils	German Measles	Scarlet Fever
Cancer	Health Education	Smallpox
Constipation	Hookworm Disease	Teeth
Chickenpox	Infantile Paralysis	Tuberculosis
Diabetes	Influenza	Tuberculosis Placards
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Don't Spit Placards	Measles	Typhoid Placards
Eyes	Pellagra	Venereal Diseases
Flies	Residential Sewage	Water Supplies
Fly Placards	Disposal Plants	Whooping Cough
	Sanitary Privies	

SPECIAL LITERATURE ON MATERNITY AND INFANCY

The following special literature on the subjects listed below will be sent free to any citizen of the State on request to the State Board of Health, Raleigh, N. C.

Prenatal Care	Baby's Daily Time Cards: Under 5 months;
Prenatal Letters (series of nine monthly letters)	5 to 6 months; 7, 8, and 9 months; 10
The Expectant Mother	11, and 12 months; 1 year to 19 months
Breast Feeding	19 months to 2 years.
Infant Care. The Prevention of	Diet List: 9 to 12 months; 12 to 15
Infantile Diarrhea	months; 15 to 24 months; 2 to 3
Table of Heights and Weights	years; 3 to 6 years.
	Instructions for North Carolina Midwives.

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Some Changes Among the Professional Personnel

AS a rule we do not use the space in the HEALTH BULLETIN to record the comings and goings and the frequent changes, minor or major, among the rather large organization which now functions in North Carolina under the general term State Board of Health. The Editor has always felt that the space in the HEALTH BULLETIN should be utilized as far as possible for the purpose of placing helpful information for the people of North Carolina in order to aid them in protecting themselves from preventable diseases. However, in recent weeks, there have been some changes made among the secondary staff, we might say, which we think of enough interest to deserve mention here.

Dr. Thomas C. Worth, who came with the Department of Preventive Medicine in September, and who has rendered excellent service as an Assistant Director, especially in the field of Maternal and Child Health Services, left the work on April 15th to take up his internship at the Massachusetts General Hospital in Boston. Dr. Worth is an honor graduate of the University of North Carolina and of the Harvard Medical School. Dr. Worth's contribution has been extremely valuable, and while the Board very much regrets losing his service, every good wish goes with him for permanent success in his chosen life work.

Dr. J. Roy Norton succeeded Dr. Worth and is now Assistant Director of the Division of Preventive Medicine, which includes Health Education Work, Medical Inspection of Schools, Maternal and Child Health Services, and Crippled Children's Service. Dr. Norton is a graduate of Duke University. He took his first two years in medicine at the University of North Carolina Medical School, and then graduated at the Vanderbilt University Medical School. For the past year, Dr. Norton has been Assistant Director in the County Health Department. Dr. Norton was for four years City Health Officer at Rocky Mount where he made an excellent record. He left that work temporarily to take a year's scholarship in the Harvard School of Preventive Medicine. On completing his studies there, he came with the Board of Health as Assistant Director of the County Health Work one year ago. The Board feels that in Dr. Norton it has a well qualified man for this important place and predicts for him many years of useful service in his chosen field.

Dr. G. M. Leiby, on October 1, 1936, was employed as Consultant in Venereal Disease Control Work. Dr. Leiby is a graduate of the University of North Carolina, Vanderbilt University Medical School, and the Harvard School of Public Health. Dr. Leiby

was Assistant District Health Officer in the Haywood-Jackson-Swain Health District in this State immediately before coming to this department. Since he was employed here, he has been engaged in field activities in connection with the venereal disease control program, these activities being principally of an educational nature.

Dr. Robert L. Robinson, a native of Mars Hill, North Carolina, and a graduate of Wake Forest College and the Emory University Medical School, has recently become an associate in the Division of Industrial Hygiene.

During the past quarter Mr. R. F. Hill, Jr., has been transferred from malaria drainage work to municipal water and sewerage work in this division. Mr. Hill is a graduate of Virginia Military Institute, and more recently of the Public Health School at the University of North Carolina. He has had about eleven years of practical experience in various forms of engineering work before becoming attached to this Board.

Mr. Arthur B. Wigley, a civil engineering graduate from Duke University in 1935, has recently come with this division, after finishing the public health course at the University last January. For the present, Mr. Wigley will be stationed in the office, assisting with designs for small sewage treatment plants, milk plants, and other engineering office work.

Mr. Albert Worth Petty, a graduate sanitary engineer from North Carolina State College in 1934, has recently completed the public health course at the University, and after a few months preliminary training work in the office and in the field, Mr. Petty has been stationed at Morehead City to be in charge of shellfish sanitation and other engineering work along the coastal counties from Carteret County northward.

Finally, Mr. W. H. Richardson, who was private secretary to Governor Cameron Morrison, and for the last twelve years publicity man in the State Department of Agriculture under Commissioner Graham, is now publicity agent for the State Board of Health.

About Virginia Dare and the Roanoke Island Celebration

FOR the past ten years or more in these columns we have frequently talked much about the death of infants all over this State, particularly those under one year of age. We mean those infants whose deaths are a needless sacrifice for the want of application to everyday life of the known facts which would prevent them.

This month we are turning our attention to a brief description of the birth and death of the first white child born on American soil, Virginia Dare, born on August 18, 1587, in a cabin within the bounds of the rudely constructed fort set up as a protection

against Indians by the little colony which Sir Walter Raleigh had sent out from England to colonize a new world. According to all historical records, Virginia Dare's life was no different from the 5,000 or so babies who are born each year in North Carolina today, only to meet death before celebrating their first birthday. After 350 years, massacre from the Indians is no longer a peril to babies, but that is about the only cause of preventable deaths which does not now play a part in ending the lives of so many of our babies every year.

This month we are lending our mite in calling attention to the people of the State and nation to the celebration that is to take place on Roanoke Island in memory of the birth of Virginia Dare and of the colony which so soon perished after it was established on the eastern shores of our beloved State. We are publishing two of the pictures in this issue which have been kindly provided us by Mr. D. B. Fearing, chairman of the Dare County Board of Commissioners, and who is in charge of arrangements for the celebration to be staged there between July 4 and September 4.

There is no more historic spot on the American Continent and which should contain more interest for the people of this country than Roanoke Island. For many decades we have suffered from poverty and discrimination of various kinds, the years between 1861 and 1865 destroyed the best of the man power in the State, and the subsequent years of reconstruction and economic oppression left our people with what the psychologists call a thorough case of inferiority complex. A few years ago when some of the more venturesome individuals in the State began to talk of some of the "firsts" which North Carolina could claim, they were so immediately overwhelmed by some of the self-appointed, allegedly intellectual individuals who levelled such a volume of ridicule at them that most of such people were glad to withdraw from sight and let the State resume its humble position between the surrounding giants. It is with pleasure, therefore, that we record here that some of the courageous souls on the eastern shores of our State have withstood the storms of criticism and ridicule, and who now dare to proclaim to the world some of the genuine reasons why Roanoke Island and Dare County should be recognized as a section of great historical importance. These

were "firsts" which the State can stand up and claim throughout the world without the possibility of refutation.

It is a recognized historical fact that this effort of Sir Walter Raleigh to establish this colony on Roanoke Island in 1587 was the beginning of English civilization in the new world. It is also a well recognized historical fact that the child of Ananias and Eleanor White Dare was born on Roanoke Island, and that she was the first white child born of English parentage in the new world. It is a further fact of historical record that Virginia Dare was baptized a few days after she was born at one of the first religious exercises held in America. It is a fact now recognized by most impartial historians that had not this effort at colonization been made on Roanoke Island in 1587 that the efforts made at Jamestown twenty years later would not have been undertaken. Therefore the entire history of America and of the world would have been very much different. There can be no doubt but that the whole of America would have been settled by the Spanish and French coming up from the South through Mexico. There are many other reasons why these efforts on this island should be commemorated and emblazoned on the pages of history throughout the world for all time.

The tragic termination of this colony has afforded one of the greatest mysteries of the world. No solution has ever been offered and no satisfactory explanation has ever been advanced as to what became of Virginia Dare and these other colonists. It has been assumed, of course, that the baby died within a few short months of her birth and that the remaining members of the colony soon met a similar fate.

Working with funds provided through the various Federal relief agencies in this State, a group of people on the island have succeeded in

having some reconstruction work done at old Fort Raleigh. No authentic records are to be found in this country or England as to the exact size or style of the buildings the colonists erected at the original fort. The committee of investigation learned from reliable sources that houses were constructed out of logs and that the roofs were thatched. Common sense would indicate such as that was the only method they could have used to construct their houses from material they found at hand, and it was natural to follow building methods of which they were accustomed in England, except that they found no rocks on the island.

These agencies have erected an interesting group of buildings including a chapel as a memorial to the first Christian sacrament of record on the American Continent, commemorating the baptism of the Indian chief, Manteo, and Virginia Dare. No one has ever claimed that the buildings constructed at Fort Raleigh were the exact replica of those built by the colonists, but they were constructed to represent a symbolic memorial. The United States Park Service has recently made public announcement that they would not accept this area as a part of the Park Service until all these buildings were removed. It is a plain fact that the Park Service, nor any other agency in the world, can tell

the exact type of buildings constructed originally, because there is nothing in the written records in America, England, or France to provide authentic information as to the construction. Every visitor to this area is tremendously impressed with what is to be seen and felt on this historic spot.

On our front cover we are publishing a photograph supplied by Mr. Fearing showing the actual site where these first colonists landed. On this site every Friday, Saturday, and Sunday nights from July 4 to September 6 will be presented a pageant-drama prepared by Paul Green, the North Carolina playwright, who is already famed for his work.

It is only fair to add to the above that a few miles up the beach on Kill Devil Hill, near Kitty Hawk, stands the great government monument erected to the memory of the Wright brothers on the spot where they succeeded in operating the first heavier than air flying machine in the history of the world.

We trust that we may be pardoned for closing this sketch with the hope expressed that conditions will be changed sufficiently throughout the whole State in another 350 years so that a preventive baby death will be unknown in North Carolina at that time.

The Development of Local Health Service in North Carolina

By R. E. Fox, M. D., Director, Division of County Health Work

FULL-TIME local health service is available to some 2,268,275 citizens of North Carolina out of a total population of 3,170,276. These figures are on the basis of the 1930 Census. This population served by full-time local health service is in fifty-three of

the counties of our State. The service rendered in these counties is performed by county, city, or district health departments. This leaves some forty-seven counties and 902,001 of our people not provided with full-time health service. It is the endeavor of the

State Board of Health to provide as rapidly as possible for the remaining population of the State some type of health service.

Wherever full-time health service is provided, the following services are rendered:

1. The statistical records of births, deaths, and communicable diseases are collected, tabulated, and analyzed. This information is utilized as a yard-stick in measuring the health and progress of the community.

2. School health supervision, including physical examination of school children for defects, is offered by full-time local health service.

3. Local health organizations provide immunization service for the control of smallpox, typhoid fever, and diphtheria.

4. An organization is provided for the correction of physical defects, such physical defects to be corrected by competent physicians of the area served by the health service.

5. The health service conducts an organized program to reduce maternal and infant deaths.

6. The service provides a venereal disease and tuberculosis program conducted in co-operation with the local medical profession. In combating venereal diseases and tuberculosis, no community can adequately provide service for these conditions without following the cases through until they are arrested or cured.

7. Full-time local health service conducts an educational and supervisory program which goes far toward correcting environmental sanitation, with particular emphasis on safe excreta disposal, malaria control, providing a pure and wholesome water supply, a pure milk supply, and pure food for the citizenship of the community served.

8. Local health organization conducts epidemiological investigations and institutes adequate, intelligent, and effective measures for the prevention of the spread of communicable diseases.

9. The public health nurses on the staffs of local health departments visit homes of school children who are absent because of communicable diseases and in whom physical defects may be found, take such steps as may be necessary to prevent the spread of disease and encourage the correction of physical defects. The nurses visit homes in the interest of expectant mothers in prenatal care, encouraging physical examinations, and securing the services of regular licensed physicians for the period of confinement.

10. Permeating this whole program is the idea of public health education which is carried on by organized health service in the form of individual education and education of the masses. In fact, the health education and prevention of disease is the fundamental basis of organized health work. Organized health departments are not intended as corrective or curative agencies, for these functions are best performed by the private practitioners of medicine.

11. The local service supervises midwives, instructing them in elementary hygiene, and enjoins them from engaging in such practices for which they are not qualified and are, in turn, dangerous procedures, often resulting in the death of the mother and infant.

12. Public health has been defined "The art and science of preventing disease, prolonging life, and promoting physical and mental efficiency through organized community effort." By the health department co-operating with the medical profession, welfare and civic organizations, as well as other governmental and community agencies, these ideals are realized.

The State Board of Health has at its disposal funds for helping all of the counties in the State to establish full-time local health service, provided these counties are willing to make an adequate appropriation of local funds to match State and Federal funds for carrying on such health services. When inquiries in regard to this matter come to the State Board of Health, information pertaining to how this co-operative undertaking can be established is given, and when requested by interested groups or officials, representatives of the State Board of Health appear before such bodies for the purpose of explaining in detail the ways

and means of providing health service to the citizens of a county, or groups of counties. In counties having small populations and low assessed valuations, it has been found expedient to develop district health departments embracing two or more adjacent counties.

There is no reason why every county in the State of North Carolina may not be able to have some type of full-time local health service, provided they want it and are willing to co-operate with the State, and when necessary, with neighboring counties embracing a population sufficient to warrant the establishment of a health unit.

The Place of the Hospital in a Syphilis Control Program*

By G. M. COOPER, M. D., Assistant State Health Officer

A PAPER of this character and under such a title ten years ago or even five in North Carolina would have been out of order. Today, however, there is hardly a place in the State where a resident does not have hospital facilities in emergencies available within two or three hours, at the outside. As a result of some years of agitation on the part of many agencies throughout the country, there is now widespread interest in the control of syphilis. This program should include the control of gonorrhea also, but in the case of the latter disease there is as yet no known effectual method of reducing the infectiousness of that disease to a point of time anything like comparable to that of syphilis. The long-range devastating effects of syphilis also have something to do with the effect on the popular imagination.

In some countries of the world a routine serological test is required of every pregnant woman. In our own

maternal centers in this State it has been required now for a year as routine practice for every first visitor. The women coming to these centers are from the indigent classes having no family physician. We have found in the some 4,000 examinations we have made within the year about 12 per cent reacting positively to the blood test. It is estimated that there are more than half a million active new cases of syphilis in the United States every year which are treated through hospitals, clinics, or by competent private physicians. Another estimate places the number at about half a million cases who are treated at first by the various quacks, cultists, and charlatans, and by drug clerks. This symptomatic treatment destroys

*A paper prepared for the recent meeting of the Tri-State Hospital Association of the Carolinas and Virginia held in Raleigh.

the chance of effective treatment through the period most important from the standpoint of obtaining a cure. A further estimate by experts of the United States Public Health Service places the number at not less than 10,000 children under fifteen years of age who acquire the disease annually through innocent methods.

A New York City commission published last summer a report of investigations which were made in Great Britain and the Scandinavian countries. The most interesting of these descriptions pertained to the methods which they described as having been successfully carried out in Denmark and Sweden. In Sweden the commission stated that it found that syphilis was as infrequent as typhoid fever is in New York City today. In Denmark, from the great city of Copenhagen, they reported that active new cases of syphilis had fallen from a total of 3,000 in the year 1919 to less than 200 in 1933. The record for the country outside of Copenhagen was not so good, and the reason given by the commission was the better hospital treatment available in the city than for the country outside. The commission stated that in Sweden, Norway, and Denmark an important feature of the plan of combating syphilis and gonorrhea is ample facilities for hospitalization.

Denmark has about the same number of people that the State of North Carolina has. However, they are people who are highly educated, of the same racial strain and for the most part of about the same social status. Furthermore, they are people who believe in law and order and have profound respect for the authorities of their country. The commission found that in Denmark the percentage of illegitimate births is high, more than 10 per cent. That compares to about 8 per cent in North Carolina. Con-

traceptive practices have been much exploited in Denmark for many years. Nevertheless, they maintain their high rate of illegitimate births, but on account of effective control methods, the presence of syphilis is very slight. The astounding statement was made that in one of the great hospitals of Copenhagen having 1,800 deliveries per year, more than half of them being unmarried mothers, that in all the group of 1,800 confinement cases delivered in one year, 1932, there were only 32 cases of syphilis found among that large group of pregnant women.

It is stated that physicians are well paid for their services and the hospitals fully equipped to deal with the problem. In 1932 all cost of diagnosis and treatment of syphilis was made an obligation of the State of Denmark. Treatment is compulsory and free to any patient who claims it. In all the Scandinavian countries they found that the work of the quacks and cultists was strictly limited to a very low minimum. The law in Denmark provides that, under certain conditions which render it desirable or practical, a person with syphilis or gonorrhea in the infectious stage may be compelled to enter a hospital for treatment.

One of the first problems we feel for North Carolina in a syphilis control program is first to find out how many people are infected and where they are. As a rule, only about 400 deaths are recorded by the Vital Statistics Department each year in North Carolina as being caused by syphilis, locomotor ataxia, and paresis, and only about 30 as a result of gonorrhea. All of us know that out of the 35,000 deaths, or thereabouts, annually recorded in North Carolina that a great many more of them succumb to syphilis than these figures indicate. In my opinion, the place where the hospital can render the greatest service in dealing with this problem is in the first

place to *help make the records speak the truth*. Every hospital in the State might do well to require a serological test for all patients of both sexes up to 40 years of age. Syphilis is largely a disease of late adolescence and early maturity, that is, syphilis in its ravaging, devastating stages. By co-operative action, the hospitals can gradually increase the number of autopsies of doubtful cases of death and establish facts where only a surmise existed.

The hospital also can by better laboratory methods adopt more sensitive tests for the detection of syphilis in their patients. The most important contribution the hospital can make, however, is in the field of treatment. The hospital should be jointly responsible with the medical profession and Board of Health for the conduct of all clinics of whatever nature in any community. Better still, the hospital should expand the outpatient department under the full control of the physicians working jointly with the health departments in all the larger towns and cities.

The hospital has an advantage in keeping accurate and comprehensive records. When a patient leaves, these records should become available for any other hospital or reputable private physician in carrying on continued treatment for syphilis when first commenced in a hospital.

As all of us know, treatment for syphilis control should be started before the Wasserman test shows positive. Dark field examinations of serum from suspected chancres will usually reveal syphilis in the earliest stage. It makes possible a diagnosis weeks before serological tests will be positive. Laboratory technicians, competent to make dark field examinations, should be available in every hospital treating syphilis. Satisfactory speci-

men containers for chancre serum are distributed by the State Laboratory of Hygiene. These containers make it possible for every physician in North Carolina to have dark field examinations made in the laboratory. If adequate treatment is started in the primary stage, the patients are quickly rendered non-infectious in 90 per cent of cases and will probably be completely cured. That means that a diagnosis should be made first, as soon as possible after a patient has the least reason to suspect infection from syphilis, vigorous treatment should be at once instituted, and the patient should be given weekly treatments continuously for not less than 70 weeks, part of them with the arsphenamine and part with bismuth before the patient could possibly be considered safe. The hospital can help emphasize that if vigorous treatment is commenced at once, we can expect that in a period sometimes as short as five days the patient can be made non-infectious through ordinary contact to other people. Such employees should not be discharged, but should be retained under supervised treatment. The hospital is in better position to impose such a procedure and to satisfy at least the hysterical fears of people who would be likely to become alarmed and discharge employees when it would not be necessary and would only make a bad matter worse.

In view of the increasing number of deliveries in hospitals everywhere, more attention should be given to the possibility of congenital syphilis so that proper measures can be instituted early in such cases. A big problem is to induce every syphilitic person to go to a competent physician, a hospital, or a clinic sponsored jointly by hospital and physician for diagnosis and treatment. The hospital management can do a great deal in this respect.

The Committee on the Public Health Control of Syphilis of the Conference of State and Territorial Health Officers, headed by Dr. Robert H. Riley of Maryland as chairman, reported to the Surgeon General early this month with especial recommendations. Among the recommendations for this country-wide work we quote the following: "Close relationship usually exists between the incidence of syphilis and the character of the population. The incidence of this disease is particularly apt to be inflated if the population group is an urban one or if the percentage of Negroes in the population is higher than average. If success is to be attained in the control of syphilis, special attention must be paid to the problem in urban areas and control of the disease among the Negro population." The hospital should be the hub of this program. The committee further recommended specific investigation facilities for the hospital of all indigent infectious patients, even of private patients who require such care and whose physician requests it. Also, they recommended the routine requirement of a blood examination for each pregnant woman as soon as adequate facilities for dependable tests are available.

In conclusion, I quote from Surgeon General Parran of the United States Public Health Service in his opening address to the thirty-fifth annual Conference of State and Territorial Health Officers with the Public Health Service in Washington on April 7, as follows:

"We are lacking in much basic information concerning existing facilities for treatment and control as well as up-to-date information concerning the amount of the disease in a given community. Studies of prevalence, mostly out-of-date, give a gross picture. Massachusetts and New York have more recent data as to prevalence

and trends. At the recent annual Conference on Venereal Disease Control it was agreed that 'facilities were inadequate.' What are the present organized facilities? How many states know the number and competence of the laboratory diagnostic centers within their borders? A recent test of certain public and private laboratories shows that one in ten of them perform a test so insensitive that one-half of the cases of syphilis are missed; other laboratories are making false positive reports and thereby labeling healthy persons as syphilitic. The laboratory service of the country, public and private, needs a thorough overhauling. This can be accomplished by careful check tests of performance. The State health departments have a real obligation to guarantee to the medical profession that every laboratory performing serodiagnosis of syphilis is doing accurate work. "How many large cities have any city-wide plan of syphilis control? The director of a voluntary hospital clinic in a nearby city, trying to do his part in syphilis control, began a careful reporting of all lapsed infectious cases to the health department, only to be told, 'Don't send us any more reports. We can't investigate them, and your notices clutter up our desks.' In the same city the patient can get a positive or a negative report on a blood test, depending upon where he goes for it. In many dispensaries treating syphilis, the chief of the service rarely puts in an appearance, leaving the actual operation to internes and younger untrained men. In the same clinic over-worked social service and nursing staffs try with indifferent success to carry the load. One cannot expect the physician, struggling to make a living, to devote his time to the operation of a syphilis clinic without some compensation. The voluntary hospital clinics of the country should

be tied into a city-wide and state-wide plan of control with subsidies from the public health departments granted to them if minimum standards are met."

Dr. Parran closed with the following pertinent statement: "How many general hospitals in your state accept syphilis and gonorrhea for treatment?

All available evidence points to the conclusion that hospital authorities still refuse to accept contagious cases of these diseases, although their free beds are filled both with acute complications under a more euphonious diagnosis, and with late results of heart and nervous system complications."

A Discussion of Summer Air Conditioning and its Possible Effects on Health

By M. F. TRICE, Engineer, Division of Industrial Hygiene

THE subject of summer air conditioning is of universal interest.

The increasing use of air conditioning devices in homes, factories, stores, restaurants, theatres, and other places of business and recreation is removing it from the category of the unusual and is rapidly bringing it within the daily experience of the vast rank and file of our people. With the advent of the warm summer months at hand, the subject is particularly timely.

The cooling of homes and business establishments is of such recent development that only a limited amount of research has been done on the probable effect of it upon health. However, ventilation, air movement, and the effect of heat and the lack of it on the human system have been studied by several investigators. Such work has yielded much information that is applicable in the design and operation of air conditioning systems. Data on the physiological reaction of man to temperature changes, air movement, humidity, etc., permit certain deductions to be made as to the probable effect of such factors upon health. Therefore there has been gleaned from the literature on the subject for presentation at this time certain informa-

tion that may, perhaps, result in the more effective operation of such systems and which, in addition, may bring to those who read this article a better appreciation of some of the factors involved in the conditioning of air.

AIR CONDITIONING DEFINED

The term "air conditioning" includes any factor, or process, that may be employed to change, or control, the chemical or physical properties of the atmosphere. It is generally accepted as implying the simultaneous control of temperature, humidity (i.e., moisture content), movement and purity of air. It is recognized that in any interior there are changes in the composition of the atmosphere, such as an increase in the carbon dioxide content and a decrease in the amount of oxygen originally present. However, under the worst conditions of air pollution and stagnation such changes in composition are negligible and are usually ignored. The objectionable condition most frequently encountered is due to changes in air composition, or purity if you choose, brought about by human beings themselves. In a room in which the air is permitted to become stagnant it is soon filled with odors from the mouth, nose, body, and clothing. Under such conditions the

moisture evaporated from body surfaces greatly increases the water content of the atmosphere. Such vitiated air is capable of producing loss of appetite and a disinclination for physical activity.

EFFECT OF TEMPERATURE

The effect of temperature on human well-being is strikingly demonstrated by the information obtained in studies of the incidence of industrial accidents. It appears that industrial accidents reach a minimum at about 68 degrees F., increasing above and below that temperature. The effect of cold or a lowering of the heat content of the atmosphere results in the withdrawal of blood from the surface capillaries, a dewatering or thickening of the blood, and a speeding up of the body metabolism to produce more heat. Involved in such changes are the thyroid and adrenal glands. An increase in temperature results in a more or less reversal of the body changes just enumerated. In order to expel the heat generated in the body, there is an expansion of the surface capillaries, and the blood rushes to the surface. "This affects the stomach, heart, lungs, and other vital organs, and it is believed that the feeling of lassitude and discomfort experienced is due to the anemic condition of the brain. The stomach loses some of its power to act upon the food, owing to a diminished secretion of gastric juice, and there is a corresponding loss in the antiseptic and anti-fermentive action which favors the growth of bacteria in the intestinal tract. These are considered to be the potent factors in the increased susceptibility to gastro-intestinal disorders in hot summer weather."

Changes in temperature exert a decided effect upon body functions, as has been indicated. Temperature changes take on a new importance,

therefore, since in almost every community a shopping trip, a meal in a restaurant, or indulgence in a movie involves changes in temperature, some of which are abrupt and shocking. Moderate changes in temperature may be beneficial and stimulating, while extreme changes are harmful. "Experiments" . . . have shown . . . "that chilling causes a constriction of the blood vessels of the palate, tonsils, and throat which is accompanied by a fall in the temperature of the tissues. On re-warming, the palate and throat do not always regain quickly their normal temperature and blood supply. This anemic condition favors bacterial activity and is believed to play a part in the inception of the common cold and other respiratory diseases."

RELATIVE HUMIDITY

The relative humidity, or moisture content, of the atmosphere has a marked effect upon comfort and well being. The amount of moisture in the air determines largely whether a room is comfortable or uncomfortable, debilitating or invigorating. The amount of water air will hold depends upon the temperature. Thus, a cubic foot of air at 40 degrees F. can hold 3 grains of water, and at 70 degrees F. its capacity for absorbing water is more than doubled, being 7.9 grains. In winter there is usually insufficient water in the air for comfort; while in the summer, due largely to the transpiration of moisture by growing vegetation, there is too much. One function of summer air conditioning, therefore, is the removal of a part of the moisture from the atmosphere.

The relative humidity of the atmosphere is a figure representing the actual amount of moisture present at any designated temperature. It is a ratio of the amount of moisture present at a given temperature to the total

quantity of water that could be absorbed at that temperature. Thus, a relative humidity of 90 indicates that the air contains 90 per cent of the moisture it could hold at the temperature at which the reading was taken. It has been found by experiment that man is most comfortable when the relative humidity is between 40 and 60. At such relative humidities the air is approximately only 50 per cent saturated with moisture, which means that perspiration evaporates readily, but not so quickly as to induce chilling.

The effects of humidity on the human being are not well known. Warm moist air, as well as cold moist air, impairs body functions. Warm moist air brings the blood to the surface, which reduces physical and mental activity and frequently results in a loss of appetite. Warm moist air results in a rise in body temperature when the room temperature goes above 70 degrees, resulting in a condition simulating fever. Cold damp air on the other hand depresses metabolism, allowing waste products to accumulate. In this connection it is interesting to note that physicians have discovered that in caring for premature infants an adjustment in the temperature and humidity to which they are subjected, so as to stabilize body temperature, results in a decrease in the incidence of diarrhoea and mortality, in an increase in gains in body weight, and the reduction of infection to a minimum.

AIR MOTION AND VENTILATION

Air motion is second in importance to temperature. In many instances the effects of a vitiated or humid atmosphere may be mitigated by the simple expedient of inducing a movement of the air. Air in motion carries away body heat, aids in drying moist surfaces, and disperses odors that may tend to stratify. The venti-

lation standards of the American Society of Heating and Ventilating Engineers contain this statement: "The air motion in such occupied spaces, and in which the only source of contamination is the occupant, shall have a velocity of not more than 50 feet per minute measured at a height of 36 inches above the floor."

Any discussion of air motion quite naturally brings up the question of ventilation. There should be at least 30 cubic feet of air per person circulated each minute. Usually about 10 cubic feet per minute of outside or conditioned air is admitted, and the room atmosphere circulated sufficiently to provide the per capita requirements just given. In some instances it is necessary to admit each minute ten or more cubic feet of outside air per person in order to obtain satisfactory conditions.

OPTIMUM TEMPERATURE

Various experiments have been made to determine the temperature and humidity at which the greatest number of persons are comfortable. Such temperatures were found to range from 68 degrees F. to 75 degrees F., the optimum for all such studies being 71 degrees F. Any relative humidity from 30 to 60 was satisfactory, although some investigators raise the lower limit to 40 for the most healthful conditions. Unfortunately, such experiments have all been made in localities wherein the climate is much cooler than in North Carolina. It is, therefore, quite probable that the subjects employed for the experiments would be comfortable at lower temperatures than would North Carolinians, who are accustomed to a warmer climate. The optimum temperature for North Carolinians should be several degrees higher, probably 73 degrees or 74 degrees F.

OUTSIDE TEMPERATURES SHOULD GOVERN

INSIDE TEMPERATURES

Even when an optimum temperature has been decided upon, it should not be maintained at all times, regardless of what the weather conditions are on the outside. Recently there came to my attention a photograph of a theatre front which carried a sign, the import of which was that on the inside a temperature of 70 degrees was main-

tained at all times. Many business houses make the mistake of maintaining a constant inside temperature regardless of weather conditions. The inside temperature should always be governed by the outside temperature. The American Society of Heating and Ventilating Engineers presents in tabular form the desirable indoor air conditions in summer corresponding to outdoor temperatures applicable to exposures of less than three hours.

<i>Outdoor Temperature</i> (<i>Deg. Fahr.</i>)		<i>Indoor Air Conditions with Dew Point</i> <i>Constant at 57° F.</i>		
<i>Dry Bulb</i>	<i>Dry Bulb</i>	<i>Wet Bulb</i>	<i>Effective Temp.</i>	
95	80.0	65.0	73	
90	78.0	64.5	72	
85	76.5	64.0	71	
80	75.0	63.5	70	
75	73.5	63.0	69	
70	72.0	62.5	68	

Quoting further from the same society's standards: "The object of cooling such places in the summer is not to reduce the temperature to the optimum degree, but to maintain therein a temperature which is temporarily comfortable to the patrons who thus avoid sensations of chill and intense heat on entering and leaving the building."

SUMMARY

In this discussion on air conditioning it has been shown that extreme

changes of temperature may upset certain body functions which may result in an impairment of the health of those that are exposed. An important point made is that it is not conducive to comfort and health to maintain a constant inside temperature regardless of outside weather conditions. Inside temperatures should be governed by outside temperatures and varied in accordance with outside changes.

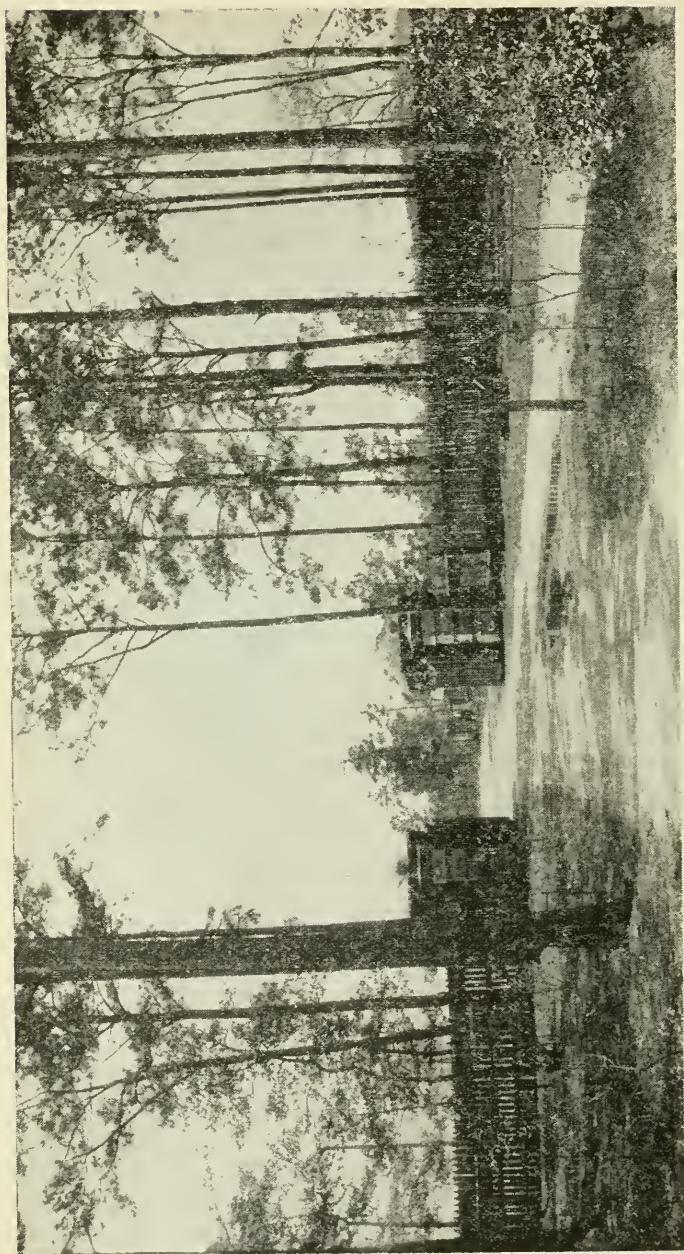
NOW ABLE TO SPEAK

By JAS. T. BARNES

Some time ago our field worker located a small child in the east affected by a severe harelip cleft-palate deformity. The family had saved since its birth to have an operation only to have this blasted by severe illness of the father—exhausting these savings. The State Board of Health accepted the case for treatment and the condi-

tion was successfully corrected. On a recent visit to the family the father was expressing his gratitude for the service and related, with tears in his eyes, that the child had spoken the first word in its life upon its return from the hospital when she articulated, quite clearly, "Daddy." One can readily imagine the joy and sunshine which this child brings to this home now—expression, which has heretofore been dormant, alive.

INSIDE VIEW OF ENTRANCE TO OLD FORT RALEIGH ON ROANOKE ISLAND



Within the enclosure as pictured above, is the spot where Fort Raleigh was originally situated on the north end of Roanoke Island. This is near what is acknowledged to be the exact location where Virginia Dare, the first child born of English parentage in the new world, was born on August 18, 1587. On this island, with the town of Manteo, County seat of Dare County, as the center, this summer from July 4 to September 4 will be staged a series of celebrations commemorating this original effort to establish an English settlement on the shores of what was then known as the New World.



The Health Bulletin

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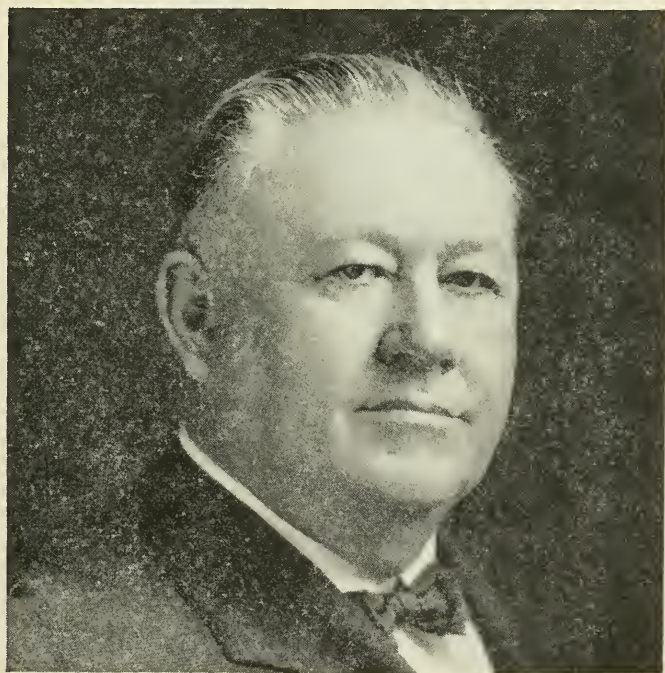
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L. B. McBRAYER, M.D.

For twenty-one years, until his voluntary retirement in April on account of ill health, Dr. McBrayer was Executive Secretary of the Medical Society of the State of North Carolina. From 1914 until 1923 he was Superintendent of the State Sanatorium for Tuberculosis. The Sanatorium being under the supervision of the State Board of Health at the time, he was thus Director of the Division of Tuberculosis and a member of the staff of the State Board of Health. His wide knowledge of public health problems has been largely responsible for the sympathetic and harmonious cooperation existing between the State Board of Health and the State Medical Society.

We take pleasure in paying this tribute to his devoted service in the public interests. May his remaining years be happy ones.

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FREE HEALTH LITERATURE

The State Board of Health publishes monthly **THE HEALTH BULLETIN**, which will be sent free to any citizen requesting it. The Board also has available for distribution without charge special literature on the following subjects. Ask for any in which you may be interested.

Adenoids and Tonsils	German Measles	Scarlet Fever
Cancer	Health Education	Smallpox
Constipation	Hookworm Disease	Teeth
Chickenpox	Infantile Paralysis	Tuberculosis
Diabetes	Influenza	Tuberculosis Placards
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Don't Spit Placards	Measles	Typhoid Placards
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Flies	Residential Sewage	Water Supplies
Fly Placards	Disposal Plants	Whooping Cough
	Sanitary Privies	

SPECIAL LITERATURE ON MATERNITY AND INFANCY

The following special literature on the subjects listed below will be sent free to any citizen of the State on request to the State Board of Health, Raleigh, N. C.

Prenatal Care	Baby's Daily Time Cards: Under 5 months;
Prenatal Letters (series of nine monthly letters)	5 to 6 months; 7, 8, and 9 months; 10
The Expectant Mother	11, and 12 months; 1 year to 19 months
Breast Feeding	19 months to 2 years.
Infant Care. The Prevention of	Diet List: 9 to 12 months; 12 to 15
Infantile Diarrhea	months; 15 to 24 months; 2 to 3
Table of Heights and Weights	years; 3 to 6 years.
	Instructions for North Carolina Midwives.

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Notes and Comment

By THE EDITOR

AN Asheville physician who is one of the Editor's valued friends wrote us with reference to the editorial matter in the May issue of the *HEALTH BULLETIN* in part as follows: "Please allow me to congratulate you very heartily on the *HEALTH BULLETIN* for May, particularly for your Notes and Comment on tourist homes, etc. Now while you are cleaning up, do not forget the bus stations and some of the so-called eating places that bus patrons have to patronize."

The truth is, the passenger travel by bus in this State has increased so much during the last two or three years, especially in certain sections that the business has outgrown all possible facilities that the companies have tried to provide. Our Asheville friend is undoubtedly right. Some of the bus stations at present are unfit for human patronage. The larger companies who have the franchise and therefore the power to keep other companies from establishing business so that there is no longer any competition in the bid for business, should make an immediate effort to provide some privacy, increased facilities, and a measure of cleanliness around the toilets in these stations. Even if there is no more room in present buildings for additional facilities, there is nothing to prevent them providing increased janitor service in order to keep the places clean. There can be no excuse for further delay in doing that much.

SOME time ago, a professional friend of ours at Clinton wrote us as follows: "This morning I read your Notes and Comment in the *HEALTH BULLETIN*. The item of the published testimonial for the patent medicine reminded me forcibly of the fact that the medical profession should look into the activities of a certain quack who is operating now in Harnett County. It is impossible for me to believe he is a physician. Case after case from this section has been to see him." Our friend then mentioned a dozen people known to the editor who are people of more than average wealth and supposed to be people of at least average intelligence. He wrote further:

"The examination, so the people who have been to him tell me, is to look at the patient through a piece of glass of which he says there are only two in existence, the other being in India where he says he obtained this one. He tells them that by looking at them through this glass he is able to diagnose ulcer, cancer, heart or kidney involvement, or whatever may be amiss. It seems he makes no charge but accepts whatever they give him, usually one or two dollars. It is a known fact that many of the people who have been to consult him and been taking of his herbs and sulphur, etc., are badly in need of the very best medical treatment that could be provided. They are all probably shortening their lives by delay incident to following this old man."

On the receipt of the above letter, the Editor wrote to the Health Officer of Harnett County asking him to kindly investigate and report. We pointed out to the Health Officer that the chief damage being done to so many people is that they ought to be under the care of competent physicians, but instead were wasting precious time which would probably mean the difference between some additional happy years and a rather early death. Dr. Hunter later replied inclosing a synopsis of a report of an investigation briefly made concerning this individual. We will not call the name of the quack because to do so would mean a thousand extra patients crowding the roads to see him about next Sunday. Dr. Hunter made the comment that his own "observation in such cases, is that advertising and prosecution by the Medical Society gives such a quack more advertisement than he could get in any other way."

We are sure that Dr. Wyatt, Secretary of the Harnett County Medical Society will not mind our quoting from his report, simply as one more item of evidence that there seems to be no limit to human credulity. Dr. Wyatt says that "so far as I can ascertain, this man has no license to practice medicine and has no medical training whatever. He is a

rather old man and has very dirty habits and appearance. He has been at his present activity for perhaps forty or fifty years. In the past he has been prosecuted for practicing medicine without a license, but a conviction could not be obtained because he has never made any charge, and the directions which he has been giving patients he has always been careful to have written by others. It has been perhaps fifteen years since any effort has been made to prosecute him. His methods of diagnosis consist of a crystal through which he looks at a patient and tells them he is X-raying them. His therapeutics consist of herbs which he and his helpers dig from the surrounding woods. Also he prescribes block magnesia, sulphur, and cream of tartar, etc. Reliable witnesses in his neighborhood say that patients come from Asheville and as far away as New York. They are by no means all poor, as some come in Cadillacs and other fine makes of cars and come in great numbers, especially on Sunday. Sometimes whole truck loads come up from South Carolina. In addition to his medical activities, he also has other talents which he exercises, which it is not necessary to enumerate here."

The Ideal Nurse*

By WM. DEB. MCNIDER, Dean Medical School, University of North Carolina

MR. Chairman, members of the Graduating Class of Nurses of Rex Hospital, ladies and gentlemen:

When the Chairman of your Board of Trustees, Dr. James W. McGee, asked me to make this address, which is not an address because it is of a more intimate nature than an address, I accepted without hesitation; first because

I wanted to be with you and through you think of the past, a past of some thirty-two years, to a period of three years spent with your like at the first, the old Rex Hospital. I have never had happier, freer, or more instructive years. Secondly I wanted to do what this beloved physician of yours wanted me to do. He knows no wrong and does no wrong and had I hesitated or

* An address delivered on the evening of May 27, 1937, to the first class of nurses to graduate from the new Rex Hospital.

refused his request I would have acted against his judgment so that I would have been wrong.

Tonight you have your commencement: you set your sail, you steer your own boat in your own way. You commence your personality as a nurse. This is an occasion when a certain type of addresser usually furnishes advice which is not asked for and which will not be given. You have had some years of advice and guidance but now you begin to act freely, thoughtfully and with a happiness and I want to ask you of what order of freedom will you employ. This word freedom is both a blessed and a dangerous word and there is another word, democracy, which we use freely and through which we may be led to act foolishly. How are you going to act with freedom? Is the freedom which is now yours one of abandon, an unrelated, unguided freedom or is it a freedom which will operate effectively as a noble profession in and of the good form which that profession deserves? Is it a freedom with an ideal which relates itself with dignity and with helpfulness to those actors on the stage who have tripped, lost their balance and can no longer help themselves? In short, how shall you live a related life as a nurse?

I have an ideal for a nurse which I would like to give to you and then I would care to mention her blessed name and speak of her briefly. When I think of my ideal nurse I think of silence, of one who comes and goes quietly, unostentatiously. Her personality is one of poise, she brings peace and an understanding without argument or questioning. She sees a need and she does it, she observes and she records it and records it accurately. Without an accurately kept chart a physician who can understand is deprived of one of his main sources of information. The laboratory record may indicate a given num-

ber of milligrams of non-protein nitrogen in 1 cc. of the blood of a patient. This is necessary; but you record, or better, you whisper without a record of it that Mrs. X could not sleep on account of her unhappy home, is an important record of another order. The wise physician will forget his drugs and pay a visit to this home and you will employ a very powerful drug which I trust you will know how to use, assurance and sympathy. These things you will observe have been done quietly, without fuss which brings peace. This ideal we are talking about is not sad, she is happy, quietly happy, she can laugh, but never loudly, and better she can smile and she has a power in her eyes which looks through the smile and carries strength. This quiet, orderly person who comes and goes talks but little, she listens, but is tight lipped. This quality enables one in an illness to feel free to talk, to talk of things, to think of things which thoughts but tenderly touch—sacred things, and such conversations should be received as such and guarded lest at an unlooked for moment a sacred trust may be betrayed. This ideal should be strong-minded with guarded determination. There are in all illnesses moments for sympathy, but sympathy may be imposed on, we are eased by it, we often fail to gain strength through it. The nurse acting freely must be able without fuss, in silence, often by a look, to say no, to mean no and to stand behind no. An undisciplined nurse, a nurse who can not administer discipline fails through weakness. This ideal must also be strong of body so she may live herself freely in helpfulness. There are modern physicians and nurses who are under indictment for selfishness, for putting themselves first and true bills should be found against them. These individuals think of rainy nights, of patients who will not or who can not pay, of eight

hour shifts. They are not nurses or physicians, they are tradesmen and tradeswomen who have failed to lose themselves in order to be found, but who are using sick individuals for purposes of financial gain. Drs. W. I. Royster and Hubert Haywood never had such thoughts and the nurses Mary Wyche and Birdie Dunn only knew that sickness meant for them to come, to stay and to labor freely. Forget yourselves that you may be found, give freely and live abundantly. Finally, this ideal of ours has a something called character—she is good. This woman is not a sissy, she could not be sad-faced, she can smile and laugh right merrily at the right place but she is good—we tie to her in moments of joy and in times of sadness and illness because she is good—that eternal Godly quality of simple goodness.

Quietness, strength of mind and of body, character as shown in goodness over and above specific training are at least some of the attributes of an ideal nurse and these qualities I would have you find in my ideal nurse, Mrs. Marion H. Lawrence, some thirty years ago Superintendent of Rex Hospital and Superintendent of the nurses in this hospital. She was an English woman. Just when and where she was born I do not know. When a slip of a girl she married an English naval surgeon who soon left his young bride to follow his ship to sea. He died and was buried at sea. Mrs. Lawrence then entered Saint Bartholomews Hospital, London, to take her training as a nurse. When this was completed she did both private and institutional work in England for a time and then went to Canada. Here she was a nurse in the Montreal General Hospital and was there in charge of one of the smallpox pavilions during the devastating epidemic of this disease. The late Sir William Osler was in charge of these pavilions and Mrs. Lawrence

nursed under him and assisted him in his autopsies when he was studying the pathology of this disease. She was the nurse who Osler referred to in his textbook on *The Practice of Medicine* as not being able to be vaccinated against this disease; the vaccination would not take, and yet she failed to contract the disease. From the Montreal General she went to Roosevelt Hospital, New York, from here to a hospital either in Louisville or Nashville and finally to Rex Hospital. We know very little about her. She was a spirit. Spirits like God—are; we need not know about either one intimately.

Hospitals, hospital management and the nurses in training in this State thirty years ago were not to say the least well organized. The nurses, physicians and the hospitals in which they worked ran in a fashion which no one knew very much about. Such a state furnished an ideal environment for Mrs. Lawrence to organize and guide. Her training was of a military order, discipline came first, guided by character and determination and she imparted these qualities to both nurses and physicians. She said what she meant and she meant what she said. This was done quietly but with a sincerity which gave it power. She saw to it that real classroom work was done by the nurses and that grades were accurately recorded. She was stern though kindly with a gentleness which made for confidence and the utmost respect. She created order in the old hospital and was the first superintendent of nurses in this State to give through training and example to the graduate nurse those attributes which she should have. She was quiet, discreet, keen of observation, strong of mind, yet full of sympathy noble in character, good. She labored incessantly. She had no on duty or off duty hours. Her character made it her duty to be where an illness needed her.

When over seventy years of age she still labored happily, effectively and conscientiously with never a thought of herself. With the knowledge that she had a carcinoma of the stomach, she gave herself with greater freedom over a period of two years. She collapsed at a post of trust in an attempt to save others. In her life of orderly freedom, of service with guidance, I trust you can find an ideal to which you will sail your boat and find a safe harbor.

"Practically there should be for each of you a busy, useful and happy life; more you cannot expect; a greater blessing the world can not bestow. Busy you will certainly be, as the demand is great, both in private and public for women with your training. Useful, your

lives must be, as you will care for those who cannot care for themselves, and who need about them, in the day of tribulation, gentle hands, trained minds and knowing hearts. And happy lives shall be yours, because busy and useful having been initiated in the great secret—that happiness lies in the absorption in some vocation which satisfies the soul; that we have here to add what we can to, not to get what we can from life. You will have been much by the dark river—so near to us all—and will have seen so many embark, that the dread of the old boatman for you will almost have disappeared; your passport shall be the blessing of Him in whose footsteps you have trodden, unto whose sick you have ministered, and for whose children you have cared."

Mention of Robeson Election on Health Department Excites Much Interest

OUR readers will recall that in the March issue of THE HEALTH BULLETIN we published a picture of Dr. E. R. Hardin, Robeson County Health Officer, on the front cover. We mentioned the fact that Dr. Hardin was probably the only health officer in North Carolina who had ever had the matter of continuance of his department work decided by popular election. On getting his copy of THE HEALTH BULLETIN, Dr. L. L. Parks, the very efficient Health Officer of Edgecombe County, sent us the following most interesting letter:

"The March BULLETIN concerning Doctor Hardin's experience in Lumberton reminds me of a similar experience that I had in Marion County, Alabama, in 1932. I was the first health officer in this county, and after six months service it was decided by the county commissioners to discontinue the county appropriation for

farm agent, the home agent, the welfare worker, and the health department; however, it was finally put to a popular vote after we had been there one year and five days. The other departments had been in operation for four or five years. The farm agent and home agent were discontinued by popular vote; however, the health department was retained. We did not receive as big a vote as Doctor Hardin did, but we received fifty-nine per cent of the total votes, giving us a nice majority.

"I am sending this information just as a matter of interest."

In a subsequent letter from Dr. Parks on this same subject he states that he was told by the Director of County Health Work of the State of Michigan some two or three years ago that one of the county health departments in that state had gone through a similar experience. Dr. Parks states

that he was not informed as to the per cent of votes favorable to the health department.

By way of editorial comment, we would like to repeat again what we have said before in this connection, and that is that when the people of a city, town, or county once have the services of a competent, well organized, efficient health department in their territory they never will willingly surrender the benefits they obtain through such a department. In our opinion, a competent working

whole-time health officer is much more essential and necessary to orderly county government than the office of sheriff, chief of police, county commissioner, member of the Legislature, or any other civic official. When the people of any county fail to have such an organization, either through an individual county unit or in a district plan, it means one of two things. First, the people themselves are totally ignorant of the functions of a health department and its value, or they live in a completely boss-ridden county run by political ward-healers.

Program Planning in the Local Health Department*

*By ROY NORTON, M.D., Assistant Director Division of Preventive Medicine
North Carolina State Board of Health*

TO carry out any comprehensive piece of work intelligently, it is necessary to do some careful preliminary planning. It is particularly true of public health work that the dreamer and the planner must precede the organized, the administrator and the practical worker. All of these tasks may be, and frequently are, done by the same individual. There is, however, a natural orderly sequence of events in the development of a public health program and in every case where this is not observed, there is confusion, lost motion, overlapping work and general inefficiency. Without a carefully prepared plan there can be no harmony or coordination, but only a babel of voices and efforts, each tending to nullify the effectiveness of the others.

Program planning will help to establish and maintain a reasonable balance between too much standardization and rampant individualism. Some health officers not only fail to make department programs but have stifled their individual staff worker's attempts at

planning by the practice of making day to day assignments. By having a planned program, the work much more rapidly assumes a balanced distribution following the seasonal emphasis on certain items or after an emergency, such as an epidemic.

In this discussion, it is presumed that there is the minimum staff of a health officer, two public health nurses, a sanitary officer, a dental program, and an office clerk. It is well also to realize in the beginning that the program is partly determined by whether it is a community without a public health department previously, whether the staff workers are new in the work or in the community and also by the personalities, training and interests of the personnel.

A logical beginning toward program planning is the taking of a careful inventory of existing community resources. It is particularly important to evaluate properly the human resources—physical, mental, and spiritual. Somewhere in the growth of a plan there should also be felt the be-

* Presented before the North Carolina Public Health Association meeting in Winston-Salem May 3, 1937.

nigh influence of a solid understanding of certain facts in history, biology, and economics as they relate to the particular community to be served. The heredity, religion, and traditional customs of the people and the local environmental conditions interact upon each other and in this setting certain impressions tend to persist. The health planner will be keen to recognize, evaluate and deal with these things.

Certain general preliminary information regarding the community to be served is essential in the formulation of a local health program. The surrounding area may vitally influence local conditions and should not be ignored. Any previous health surveys or inventories should be read but not dogmatically accepted or followed. Their chief value would be in their use in making comparisons with the present study for any tendencies or trends. The geography, geology, climate, topography, and waters should be studied. The population as a whole and separated according to age, sex, and color, with any recent changes, should be understood. Vital statistics records for the last ten-year period yield valuable information on health trends. Maternal, infant, neonatal and specific communicable disease death rates studied according to area, economic background and race may show vulnerable points so that an intelligent attack may be aimed at their reduction. The prevalence of cases of the communicable diseases, including enteritis, puerperal septicemia and pneumonia may be charted. An appreciation of special problems such as syphilis, hookworm, or malaria may thus be obtained.

Industries and occupations with their specific hazards and rapid travel or communication are of increasing importance. In what ways do occupation or moving around influence local health conditions? Per capita wealth, bonded indebtedness and tax rates are the usual economic figures stud-

ied, but the distribution of wealth among the families in the community has a more direct health bearing.

Sanitation facilities in the area may be evaluated according to (1) sanitary status of towns and villages, (2) conditions of rural water supplies and excreta disposal, and (3) condition of milk supplies and food handling places. The sanitary facilities of schools are of special importance.

An inventory of such general community resources as the following should also be made:

- (1) Clinics, laboratories, sanatoria, hospitals.
- (2) Physicians, dentists, nurses, midwives, and local registrars. (Also know the irregular practitioners, quacks, cultists and fad-dists.)
- (3) Churches, schools, school population.
- (4) Clubs and other organizations actively or potentially interested in public health.
- (5) Recreation facilities.
- (6) Available library resources.

The State statutes, State Board of Health regulations and local ordinances should be made easily accessible for reference. Plans should be made for codifying and bringing the local health regulations up to date.

It might almost be considered that a check of lay participation facilities and plans for their use is a part of the preliminary survey. All interested and potentially helpful community groups should be contacted and their support and participation enlisted. Civic clubs, women's clubs, P.T.A., churches, Red Cross, schools, welfare organizations, scouts, home and farm demonstration agents can prove especially helpful. They can help to sponsor, promote and lend clerical assistance in, or furnish transportation for, the clinics. After the willing and capable workers are recog-

nized, such organizations as civic groups, county P.T.A., Red Cross, tuberculosis association, nurses' association, Medical Society, etc., should be asked to select one member each as a member of the County Public Health Council.

Certain principles should underlie the choice of objectives and methods selected following the tabulation and analysis of the inventory of the community. Among the determining factors are the community needs, desires and facilities. From experience and study, the health director should know what activities are most likely to be adaptable to, and prove successful in achieving the desired objectives in the community.

The appraisal forms (rural, city, and N.O.P.H.N.) will be of assistance in keeping balance in the general line of work to be followed. There will, however, be certain problems selected for initial or special attack. Special abilities of the staff as well as immediate community needs are to be considered, but the program must be carefully generalized and kept that way. Where, as is usually the case, only a part of the accepted standards of activities along the different lines can be taken care of, those promising most community health protection and promotion are to be selected. This principle applies whether considering maternal and child hygiene, communicable disease control, school work, or sanitation activities.

Having assembled all possible data on community resources and facilities and by their analysis having determined the general and special community health needs, one is then ready to set up tentative objectives. These may be divided into (1) expected results to be accomplished, and (2) amount and quality of specified types of service to be rendered. Examples of the former would be to:

- (1) Secure approved sanitation facilities at all schools, including

especially water supply, excreta disposal, hand washing equipment, and drinking facilities.

- (2) Bring all midwives to have Grade A certificates.

Examples of the latter type are to:

- (1) Examine all children in grades one, four, and seven in schools.
- (2) Find all typhoid carriers and contact each personally (health officer) every three months.

Objectives of results to be achieved should be set up for each phase of the generalized program. Activities offering greatest promise of contributing to these ends can then be selected. The program should vary from year to year. The experience of many departments has shown the usefulness of stressing one thing one year and another the next. The services to be rendered in clinics or home nursing visits should be carefully determined and standards adhered to.

A very important step in program planning is the blocking out of a table of time for each worker and for the major activities. Certain days and hours should be left open for emergency work, routine office or report work. A minimum of time should be devoted to nuisances, travel, report making and welfare work and the maximum to health education and preventive work. No definite division of time can be made between field, travel and office work, but there are certain preferable seasons for emphasis on preschool work, school work, malaria control or communicable disease control. The time of day is important in planning certain parts of the work, as for instance, postpartum visits are preferably made early in the morning and clinics or centers for mothers can be attended more conveniently in the afternoon. Preschool clinics are best held in the early spring. Annual reports are made in January. A special public education campaign with the

next budget in mind is made in May and June. It is of special importance that time and funds be allotted for progressive improvement of the personnel by a continuing plan of staff education through visiting other departments, attending district, State, and national professional meetings and the regular monthly or weekly staff conferences.

I have referred to planning by the health officer, and he is, of course, responsible for the work done by the department. It is best, however, for the entire staff to contribute toward formulation of, as well as carrying out, the program. The local medical society, the county public health council and more directly and officially, the county or district board of health will help to determine certain general principles to be followed.

It is perhaps best to block off the time first on a yearly basis, then according to months, and later by weeks and days. The final separation by weeks and days can largely be done by the individual worker, with the health officer exercising general supervision to see that the generalized program is being adhered to. Where there are two or more nurses or sanitary workers, it is usually more economical to divide the work geographically rather than by specialization.

Sanitation is the oldest type of public health work. It has been modified many times and here, perhaps more than in most other phases of the work, every activity must be carefully evaluated. Like Chapin, every health officer should be his program's severest critic. Those efforts found valueless, as fumigation and terminal disinfection, must be discarded and only those of proved usefulness retained. A careful balance must be kept in order not to over-emphasize or neglect certain activities. Only by careful planning, accurate recording and an occasional look backward and forward can a generalized program be

maintained. Promotion of the new, and maintenance of the already established facilities, keeps the sanitary officer busy. Water supplies, waste disposal, food supplies including milk, housing, industrial hygiene with accident prevention, control of flies and rats, all come in for their share of attention. One must prevent the tail of purely aesthetic considerations, or nuisance chasing, from wagging the dog.

In sanitary work clear legal regulations are essential. And they should be regularly modernized and codified. Keep in mind, however, that an indictment usually means a failure in the most vital element of public health work—health education. I know one sanitary officer who was ready to begin indicting within six hours after he started his job. Keep in mind the Bible story of the still, small voice.

Communicable disease control work occupies a considerable proportion of time, especially during certain seasons. Require reporting and quarantine only when these procedures are made of epidemiological value. Except for smallpox, where there is no other reliable generally applicable preventive, immunization procedures or preventive inoculations, can be overemphasized. Infant tuberculosis and syphilis are not being fully recognized. We are not finding and following up our typhoid carriers adequately. The laboratory should be made ever more useful to the local physicians, and serviceable to the community.

Vital statistics records should be carefully analyzed and interpreted—not merely copied out and filed away to be forgotten.

The maternal and child hygiene work should occupy two-thirds of the nurses' time. Nearly 80,000 babies are born alive in this State annually. Most expectant mothers receive inadequate pre-natal care. One-third of the births

are attended by midwives, some of them ignorant and unclean. Where there is not good reason to expect that the mother can safely withstand the ordeal and bear a normal baby, conception should be averted. We have too many septic abortions. Infanticides still occur too frequently.

Next to the prenatal and infancy period, that of preschool age is the best for doing most good in protecting and promoting health. Yet the preschool child is still the "forgotten" individual.

The utmost should be made of the golden opportunities for health instruction through talks, news articles, radio and distribution of literature. The school work carried on by the Division of Oral Hygiene has demonstrated an opportunity for health education previously neglected and still largely untouched in other phases of public health work. Spot maps, charts, and graphs help to keep the work balanced and are instructive too. The clerk, the nurses, the sanitary officer, and the health officer should keep ever before them the statement of Elisha Harris that "the permanent value and success of any method or system of sanitary government will depend upon the degree in which the people are generally enlightened, concerned, and made responsible in sanitary duties." A good entering wedge is to use teachers in school work and mothers in the clinics and center work to a greater extent.

The borderline work in the promotion of individual health and efficiency offers many pitfalls. The promotion of tonsil removal and orthopedic correction of crippled children, the prevention of nutritional diseases such as pellagra and rickets, the attempts at public education with regard to cancer or heart disease or the value of regular physical examinations are in this category. The control of lobar pneumonia is becoming an activity of public health departments

in some states, notably in Massachusetts and New York. In large departments a nurse-nutritionalist has been found exceedingly valuable. Much common sense and perspective are needed by the health officer in planning this phase of his program. Public health work is primarily education and prevention and not welfare or curative practice.

A discussion of program planning would be incomplete without mention of the interrelationship of the various staff workers. Each is as a spoke in a wheel and is indispensable. Each can promote and make pleasant or can make difficult the efforts of others. The nurse can sell sanitation. The sanitary officer can stimulate appreciation of the nurses' more personal service. The health officer can strengthen or can nullify departmental activities. The clerk as go-between can in her many contacts promote the work and public appreciation for it or she can quickly and completely unsell it. The staff either hang together or hang separately. This does not mean that the whole staff should ride out to work in one car or even in twos. Gasoline might thus be saved, but the program would undoubtedly suffer.

No department program is efficiently managed unless there is incentive and opportunity stimulated toward research in disease prevention. Every staff worker should be looking for, and making, chances to improve and increase the efficiency of the public health service in the community. Little bits learned here and there will in the end mean as much as some work of vast proportions or may make the latter possible. The family folder type of records offers greater opportunities along this line than any other tool now in use.

If accurately and carefully kept, these records will be increasingly valuable in many types of public health studies.

To summarize, (1) steps in the orderly development of a good local department program have been briefly outlined, (2) certain practical considerations easily overlooked have been mentioned, and (3) the fundamental importance of harmonious understanding, cooperation and vision among the staff members themselves have been emphasized.

BIBLIOGRAPHY

1. Planning the Public Health Program, by W. P. Richardson, M.D., and Miss Josephine Daniel, N. C. State Health Department. Unpublished. October, 1935.
2. Planning a County Health Program, W. D. Cagle, M.D., Hall County (Georgia), Commissioner of Health. Unpublished, read before Georgia Public Health Association, April, 1937.
3. Special Series of Articles, late 1934 and early 1935, in Public Health Re-

ports by Mountin, Dean, McIver and Pennel.

4. Public Health Administration in the United States, Wilson G. Smillie, M.D., The McMillan Company, New York, 1935.
5. The Evaluation of Health Services, J. W. Mountin, M.D., Public Health Reports, November 27, 1936.
6. Preventive Medicine and Hygiene, M. J. Rosenau, M.D., D. Appleton-Century Company, New York, 1935.
7. An introduction to Public Health, H. S. Mustard, MacMillan Company, New York, 1935.
8. Rural Health Practice, H. S. Mustard, Commonwealth Fund, New York, 1936.
9. Policies Pertaining to the Administration of County Health Departments, W. A. McIntosh, M.D., Bulletin, Maryland State Health Department, Vol. 2, No. 5, 1935.

What Medical Meetings Accomplish

By R. N.

DR. Leo F. Simpson recently gave an interesting discussion of why doctors get together for meetings. Perhaps some questions arise in the minds of the general public regarding such a meeting as that of our State Medical Society recently held in Winston-Salem. Why do doctors from all parts of the State gather in one place to participate in scientific discussions and break bread together?

Dr. Simpson's summation for New York may apply equally well to North Carolina:

"First, a license to practice medicine is a permit to study.

"Second, the best way for a doctor to study, and to learn, at all stages of his career, is in close association with other doctors.

"This is the way the science of medicine advances. Gradually, year by

year. Not by leaps and bounds. A bit of knowledge contributed by one doctor today, an item of experience by another doctor tomorrow—thus the science and art of medicine moves like a great glacier by the momentum of its entire mass, as inevitably, as irresistibly as a glacier. Progress seldom occurs like the sudden earthquake of some great personal discovery, the contribution of one man, as happened when Koch discovered the germ of tuberculosis or Pasteur the cause of tetanus. We hope for recurrences of these great and convulsive movements to solve such problems as cancer, but in the meantime we keep doggedly, persistently, devotedly on our way toward the goal of rendering available to the human race all the knowledge which we can find which is real and tested knowledge.

"And it is in this that the medical society meeting becomes invaluable to the doctor and to the people who are his patients. It serves for a test tube for new ideas. The physician who comes to such a meeting to present new material must subject himself to the test of proving to his equals every step of the path by which he came to his conclusions. He may have overlooked something in his enthusiasm. It will not take long for other doctors to point this out. We all welcome the new fact and the new experience, but we do not accept them until proved. Our patients are not guinea-pigs, and before we try new things on them, we are going to require them to be shown to be of value by conclusive evidence.

"This is why the announcement of cures and discoveries are never made by fakirs and quacks in connection with medical society meetings. Such pretence will not stand up under the criticism of informed persons. The man who knows his subject throws the fake cure or discovery out the window. The impostor dares not show his head among

the men who know their subject. So, as his purpose in life is mere gain, merely to profit by the gullibility of those who know no better than to believe him, he goes directly to the public with his claims, and may sell many of his wares before he is exposed as a fraud. He will always claim that the medical profession refused to consider his evidence. He is required to make that claim to explain why his alleged treatment or cure has not been accepted and approved by the profession. But it is a false claim. It is easily proved to be false to any fair-minded person who will stop to think that . . . we are to have a meeting of those men throughout the State whose principal reason for coming here is to learn more about how to help sick people. It is obvious that no claim of discovery or improvement of method could fail to get a hearing before such a gathering as this. The quack does not wish to come. He knows that his promises are false and his claims fictitious, and that his evidence will be believed only by those who know less of the subject than he does."

Buncombe County Medical Society

BUNCOMBE County Medical Society has inaugurated a rather novel method of reporting its meetings. It has established an official bulletin which lists the names of the officials of the Society and then presents on its front cover the date and place of the next meeting and the subject to be discussed, and the author or authors of any papers to be presented. The reading matter, which is brief and in paragraphic style, sets forth facts of pertinent interest to the profession. For example, the current issue, from which we glean these notes, describes the rapidly growing medical library, among many other items. This is just as it should be. There is not a county in

North Carolina, and certainly not one of the larger towns, that does not need better medical library facilities. The BULLETIN notes a gift to the library of Dr. Harvey Cushing's interesting book "From a Surgeon's Journal." This was donated by Dr. Joseph B. Greené.

We trust the idea will be adopted by many other medical societies, especially as many of the papers and discussions will hinge around public health problems in medicine. The essayist at the meeting we are reviewing was Dr. J. W. Huston, and his subject was "The Childhood Tuberculosis Problem." The leaders in the discussion were Dr. J. L. Ward and Dr. W. P. Herbert.

Malaria Made a Reportable Disease

By J. C. KNOX, M.D., *State Epidemiologist*

BY virtue of the authority conferred on them under Article 9, Section 7151, of the Consolidated Statutes, the members of the North Carolina State Board of Health, in session at their regular meeting held in Winston-Salem on May 5, 1937, during the meeting of the State Medical Society, declared malaria to be a reportable disease, North Carolina now is in line with all the other southern states in which malaria is a problem, because those states have had malaria on their lists of reportable diseases for a number of years.

During the past few years there has been an increase in the incidence of malaria in North Carolina, as is shown by every method of determining this prevalence for example, deaths from malaria have increased in this State. Also, information from other sources indicates that there is an increased incidence of this disease in North Carolina at the present time.

The procedure to be followed in reporting malaria is the same as that used in reporting the other notifiable diseases. Each case should be reported on the regular card furnished by the local health department or obtained from the State Board of Health. These report cards, bearing full information on the case, should be mailed to the county health officer, city health officer or quarantine officer, who in turn forwards them to the State Board of Health.

In recent years considerable work on malaria control has been done in this State by the various governmental agencies. It is felt that this is a definite aid to the control efforts of the State Board of Health. The active cooperation of the physicians of North Carolina in reporting malaria cases coming to their attention will be necessary in promoting malaria control and will be greatly appreciated.

Arthritis, Long Baffling Malady, Now Bows to Scientific Therapy

“EVERYTHING from fallen arches to acid fruits, bad teeth and a poor colon has been accused of causing arthritis, and much energy has been dissipated in seeking the ‘bug’ responsible for this disease.” Dr. Richard Kovacs declares in his article “Physical Treatment of Arthritis” appearing in the March *Hygeia*.

Intensive study in recent years by competent physicians all over the world has gone far toward clearing up this problem. While the term “arthritis” is used principally to indicate inflammatory changes in one or more joints in the body, medical men

have learned to regard it as a disease of the entire organism.

The discovery of a variety of causes is somewhat responsible for this conception. Correspondingly, for the various forms of arthritis there are a number of possible courses of treatment. In order to treat arthritis effectively, experienced physicians make use of all known treatment measures which overcome the causes and act directly on the diseased parts.

MANY FORMS OF TREATMENT

Drugs, vaccines, physical treatment, diet and general hygiene all play an important part in treatment. The

outlook for successful results is much brighter than it was a few years ago. The best chance for a cure exists when the first hint of the disease appears, such as aching or pain in the neck, or a stiffness, pain or swelling in or near one or more joints.

The physical treatment of chronic arthritis includes heat, massage, sunlight, exercise and rest, which may be collectively described as "natural" or "physical" forces. They may serve to stimulate the defensive power of the body through speeding up the general circulation and causing chemical changes in the blood. This action is similar to the injection of various vaccines, none of which has in fact any specific curative effect.

EFFECT OF GENERAL TONIC

Physical measures may also exert a general tonic effect by strengthening

the musculature, correcting faulty posture of the body or promoting the functioning of the digestive tract. They are furthermore of the greatest importance in relieving pain and overcoming swelling and stiffness of the affected joints.

Every rheumatic patient should do a certain amount of exercising as taught by his physician; this will strengthen weak muscles and parts and prevent further crippling. In arthritis, heavy massage and vigorous stretching and pulling of joints are absolutely harmful and should never be done.

A few weeks stay at a spa or health resort is eminently beneficial to many sufferers from arthritis; for, besides the desirable mental and physical rest in pleasant surroundings, it affords the combination of physical and medical measures, hygiene and diet.—*Hygeia*.

THE LAND OF HEALTH

By PHILIP COUCH

Third Grade, Chapel Hill School

The Land of Health is very near,
And the road is very clear,
But you must be quite sure
That you are willing to take the cure.

You have to fill up with plenty of milk
And plenty of vegetables green,
Because they make your skin like silk
And your mind very keen.

You have to get lots of rest and sleep
And lots of exercise, too,
And take good care of your ears and
eyes,
And do what doctors tell you to do.

BOOK REVIEW

FEEDING OUR CHILDREN, Frank Howard Richardson, Thomas Y. Crowell Company, New York, 160 pages. Price, \$1.00.

Dr. Richardson is a competent specialist in the diseases of children. He has written several books dealing with the problems of childhood and adolescence. He always writes interestingly. This book is simply written and is practical. His hobby might be said to be writing about professional subjects for laymen to read. One of the best features of the book is that he does his part toward dispelling the hysteria that the commercial advertisers have succeeded in raising in the minds of so many parents on the vitamin question. "Feeding Our Children" is an interesting book and worth the price charged for it.



The Health Bulletin

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This Bulletin will be sent free to any citizen of the State upon request.

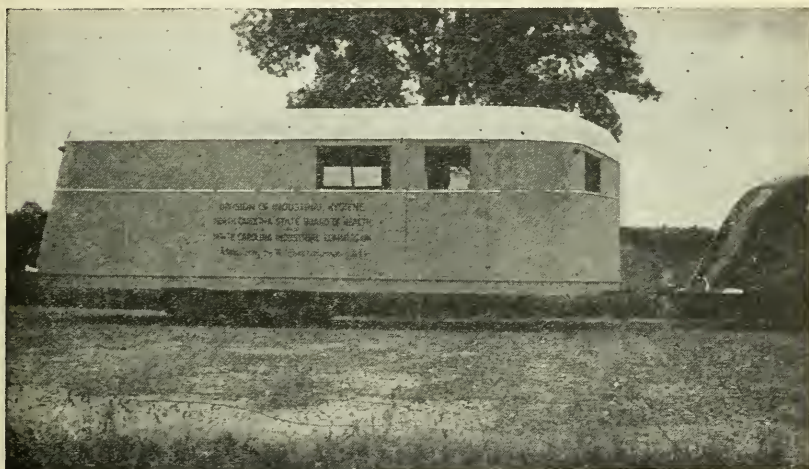
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NEW MOBILE HEALTH SERVICE



The latest addition to the mobile forces of Public Health in North Carolina is the twenty-foot trailer pictured above. It contains an X-ray machine, fluoroscope, dark room, desk, and other equipment. The trailer facilitates the medical activities of the Division of Industrial Hygiene, which is engaged in evaluating occupational disease hazards in North Carolina, particularly in those industries that mine or process siliceous minerals, and in making pre-employment examination of the workers entering such industries. The Division is a conjoint activity of both the North Carolina State Board of Health and the North Carolina Industrial Commission. The trailer bears on its sides the legend:

DIVISION OF INDUSTRIAL HYGIENE
NORTH CAROLINA STATE BOARD OF HEALTH
and
NORTH CAROLINA INDUSTRIAL COMMISSION
(Administering the Workman's Compensation Act)

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FREE HEALTH LITERATURE

The State Board of Health publishes monthly THE HEALTH BULLETIN, which will be sent free to any citizen requesting it. The Board also has available for distribution without charge special literature on the following subjects. Ask for any in which you may be interested.

Adenoids and Tonsils	German Measles	Scarlet Fever
Cancer	Health Education	Smallpox
Constipation	Hookworm Disease	Teeth
Chickenpox	Infantile Paralysis	Tuberculosis
Diabetes	Influenza	Tuberculosis Placards
Diphtheria	Malaria	Typhoid Fever
Don't Spit Placards	Measles	Typhoid Placards
Eyes	Pellagra	Venereal Diseases
Flies	Residential Sewage	Vitamins
Fly Placards	Disposal Plants	Water Supplies
	Sanitary Privies	Whooping Cough

SPECIAL LITERATURE ON MATERNITY AND INFANCY

The following special literature on the subjects listed below will be sent free to any citizen of the State on request to the State Board of Health, Raleigh, N. C.

Prenatal Care	Baby's Daily Time Cards: Under 5 months;
Prenatal Letters (series of nine monthly letters)	5 to 6 months; 7, 8, and 9 months; 10
The Expectant Mother	11, and 12 months; 1 year to 19 months;
Breast Feeding	19 months to 2 years.
Infant Care. The Prevention of	Diet List: 9 to 12 months; 12 to 15
Infantile Diarrhea	months; 15 to 24 months; 2 to 3
Table of Heights and Weights	years; 3 to 6 years.
	Instructions for North Carolina Midwives.

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Newspapers, A Growing Factor in Public Health Education

By R. N.

DR. T. G. FAISON and his excellent staff of trained co-workers have cooperated with the Hertford County Herald in the preparation of a special (June 17) Health Edition of that good Ahoskie newspaper. The Hertford County Health Department staff and Parker Brothers, the editors, are to be congratulated.

Health departments are financed through public funds and the public may reasonably expect and demand a public account of the services rendered. Private practitioners of medicine feel bound by traditional ethical considerations not to publicize the excellent service they render. A close personal and confidential relationship exists between the family physician and his patients. This relationship should be encouraged and maintained. The services of the private practitioner are still largely curative; the public health department work is preventive and educational. Much of the prevention is through public health education. By newspaper publicity, the radio, distribution of pamphlets, public talks and in private conversation we are learning more of our bodies and the diseases and disabilities to which they may fall a victim. Enlightenment, foresight and precautionary measures are fast replacing careless ignorance and smug complacency. Many of our newspapers have been doing, and we

feel sure, will continue to do, a still larger share in this good work.

For seven years the Winston-Salem *Journal* and *Sentinel*, with the local city and district health department staffs cooperating, have prepared an excellent special Child Health Edition each first of May. Editorial as well as news columns of the *Rocky Mount Telegram* and the *Raleigh News and Observer* continue to spread the gospel of disease prevention and healthful living. Clarence Poe's *Progressive Farmer* has for many years by encouraging better gardens, more and better milk cows, improved living conditions of tenants and share croppers and a live-at-home program, rather than concentrating on a money crop, made a valuable contribution to the cause of public health. These have been notably outstanding. Everyone will be better off with the passing of the day of the Latin prescription, the pretending to know everything but telling nothing, the "look wise and tell 'em nothing" attitude. Our newspapers throughout the state have done much toward bringing about this progress. All public health departments and regular agencies of publicity can be mutually benefitted, and the general public will profit greatly by a policy of complete frankness and cooperation.

Dr. Faison and his staff prepared excellent articles on sanitation, milk

supplies, midwife supervision, typhoid, diphtheria, smallpox, malaria, syphilis and health laws. A condensed report of staff activities is shown. Since the health officer does not engage in the practice of curative medicine many people wonder how a doctor could otherwise profitably occupy his time and use his training. Protecting and promoting the public health involves a wide variety of activities by the health officer, the public health nurse, the sanitary officer, the state school dentist and the health department clerk. Among the varied duties mentioned in the report are:

1. Communicable disease control, including tuberculosis and venereal diseases and vaccination against typhoid, diphtheria and smallpox.

2. Maternity, infant, pre-school and school hygiene, prenatal and postpartum instruction and care is particularly important for mothers whose delivery care is entrusted to midwives. Midwives are instructed and supervised. Finding and correcting defects of the growing child represents a sound investment of the public funds. The school dentist instructs, inspects and makes corrections of the younger group of school children.

3. Examinations are made periodically to insure public safety in the work of food (including milk) handlers, midwives, teachers and certain others. The health department co-operates with other community agencies in securing correction of eye, tonsil and adenoid, dental and crippling defects.

4. Water supplies and sewage disposal facilities must be regularly supervised during construction and maintenance to insure adequacy and safety whether for private homes, schools or municipalities.

5. All food handling establish-

ments must be regularly inspected and supervised. Dairy farms, milk plants, slaughter houses, markets, cafes, hotels, etc., serve large numbers of people and represent possible avenues of disease spread unless other than private commercial interests are considered. Think of the time and expense involved if each individual had to trace his food purchases back to their sources to be reasonably sure of their safety. The health department "Grade A" sign enables the public to know the food handlers who place community health above private gain. They deserve public appreciation and patronage.

6. The local health department examines (or sends to the State Laboratory for examination) water and milk. Diagnostic examinations are also made of blood and feces for typhoid; nose and throat swabs for diphtheria, blood and chancre serum for syphilis; smears for gonorrhea; blood for malaria; sputum, urine and feces for tuberculosis; and feces for parasitic worms.

7. Public health instruction is one of the chief functions of the health department staff. Through newspaper editorial and news articles prepared, circular letters sent out, bulletins and posters distributed, public lectures and talks made, and through private conversations the public can be forewarned and forearmed.

8. Various administrative duties in connection with the staff, physicians, nurses, hospitals, official bodies, and various non-official organizations and groups serve to coordinate local public health activities. Just as the police and fire departments protect against property loss the health department protects against health loss in the community and in a positive sense serves to promote a happier and more abundant life among the citizen-ship.

9. The careful collection, analysis, and interpretation of statistics of cases of illness, births and deaths is an important health department function. A dependable guide to proper emphasis on certain activities can thus be obtained.

It is thus seen that the health officer is not the "county charity doctor"; emphasis is on prevention and health instruction rather than curative medical practice. The sanitary officer is not merely a "nuisance chaser" and persecutor of sanitation offenders; he teaches the dangers of filth, the advantages of personal, home and community cleanliness in relation to one's food, drink and environment. The office clerk, besides performing her routine clerical duties, and efficiently coordinating the staff work, stimulates, through her daily contacts, an appreciation of public health work in the community. Following the work of the school dentist among young school children and as a result of instruction in oral hygiene, the local dentists are busier with all age groups.

Dr. Faison estimates that around 900 children in Hertford County have been inoculated against diphtheria during the past year. This represents nearly three times the number of children that reach the age of six months in the county during the year. A great number of the inoculated are under two years old. Over a hundred of the inoculations were given by private physicians, largely as a result of health department activities, although no special drive or campaign was put on. Those able to pay should more and more go to their family physician for preventive measures of all kinds. With the health department working toward the prevention of sickness, disability and loss of time from work, more people in the community are able to call their private physician early and pay him for needed services. Even the local private physicians, therefore, are benefitted by a good public health educational program because they share in the preventive work, are better appreciated, and are better paid for their curative practice.

Are Your Children Ready for School?

AUGUST is the time for getting the children ready for school. Their readiness involves more than suitable clothes, a new book-sack and a row of shiny pencils. As essential as these things are to a child's idea of readiness, they are of minor importance compared to his physical fitness and mental well-being.

It is well known that a child's progress in school, his mental and social development and his ready adjustment to school and community life are greatly influenced by the state of his bodily health. If he is suffering from such defects as bad teeth, diseased tonsils, adenoids, poor vision, impaired hearing, or from

conditions brought about by improper diet and faulty health habits, he will be placed at a disadvantage with his companions. The odds will be against him in any race.

It is therefore of the greatest importance that a child be started to school right, free of all physical handicaps and in a healthful state of mind. Parents are urged to use these days prior to the opening of school in September in which to make sure that their children are in as good health as possible, and thus ready to enter school. To do this most satisfactorily, a trip to the dentist and a check up by the family physician are advised.

Health Work Becomes Largely a Personal Responsibility

By MRS. J. HENRY HIGHSMITH

Assistant Director of Health Education, State Board of Health

IT is very evident today that a significant change has taken place on the public health front. Whereas the point of attack in public health work in years past has been centered largely on the fight against communicable or germ-borne diseases, it is now being directed toward combating serious personal ailments known as degenerative diseases. Health workers say and statistics prove that if the death rate is to be further reduced and health work strengthened at its weakest point, the degenerative diseases must be the next important object of attack, and personal interest and initiative must be appealed to as major factors in their control.

Communicable diseases can and are being brought under control through State and community programs, but heart and kidney diseases, high blood pressure, hardening of the arteries, and other conditions due to the breaking down of the organs of the body, continue to take an ever increasing toll. The death rate from such causes are constantly on the increase.

What, then, is to be the remedy for their control and where is the place to begin? Directed and applied health education for everybody is recognized as the most effective remedy and the public school is the starting place. We believe that effective personal health work must come through instruction and directed practice in the public schools, and through a co-ordinated health program sponsored jointly by the State Department of Education and the State Board of Health. We trust that the day is not far distant when such a program will

be provided for the children of North Carolina.

Twenty-five years ago the main objective in the program to conserve the people's health was to keep down germs, those invisible forms of life responsible for the spread of many diseases. Well do we remember "Swat the Fly" campaigns, and the first efforts to secure safe milk and water supplies, the construction of effective sewer systems, the passage of laws for clean food, and other measures aimed at the protection of the people's health.

Back in 1914, which was the beginning of keeping records of the births and deaths in North Carolina, a large number of all deaths in the state were due to communicable diseases—such diseases as typhoid, diphtheria, whooping cough, measles, scarlet fever and smallpox. To be exact, from these six diseases in 1914 there were 1,660 deaths, whereas there were only 335 deaths from these same causes in 1935, and yet the State by this time had a much larger population. This was a reduction of 80 per cent, a magnificent achievement in public health work in twenty-one years.

Consider another picture, of six other conditions or diseases, namely, heart disease, kidney trouble, hardening of the arteries, high blood pressure, diabetes and cancer. In 1914 there were 5,511 deaths from these conditions in North Carolina. In 1935 there were 13,628, or an increase of more than 40 per cent. According to the mortality statistics for the nation these diseases have increased 54 per cent in the past 34 years, and

this in spite of the progress which has been made by medical science in diagnosing, treating, and often preventing them altogether.

It is seen therefore that the public health problem of today is to get the individual man or woman intelligently interested in conserving his or her health, in adopting a regimen of living that will guard against the untimely breakdown of the vital organs and a wreck of the human system. While we believe that the most effective personal health work must come through the schools, there is much the adult man and woman can do to prolong their physical powers and insure their enjoyment of life for years to come. In the first place, each must determine what his own health problem is, what hinders him from enjoying health and efficiency 100%, and then he must set about to remedy it.

When it is known that faulty living habits are more often responsible for prematurely shortened lives than any other single factor, the correct procedure would be to consider first one's way of living. Perhaps overwork, with too many and too long hours given to one's job with no provision made for rest, recreation or play is YOUR health problem. Then why not plan to take a vacation, even if at your own expense? It will pay big returns in better health, efficiency, and a contented spirit. Oftentimes, the only obstacle standing in the way of a vacation is the planning for one. Why not plan now to get a much needed rest this summer? Every person who carries any responsibility year after year needs a change, a letting up of the tenseness and strain that the burden of responsibility puts upon the nerves, the brain and the heart. A wiser plan, however, would be to see that every day, rather than that every year, has a definite period

of relaxation and rest. Overwork and working continuously under pressure are hazardous to health and long life.

Perhaps your personal health problem is not overwork but over-eating, or eating unwisely. Lack of interest in the proper selection and combination of foods, together with faulty eating habits, are the cause of most stomach ailments, and much personal ill health. Today one should be well informed as to the basic elements and values of food and should apply this knowledge to his every day living. In fact, it should be one's first business to see that his body, the human machine, is kept in good condition and that it continues to function properly.

Whatever one's health problem may be, he owes it to himself and his loved ones to set about with diligence and integrity to correct it. Especially should men and women of around fifty be on guard against the approach of physical disabilities connected with later life. Fortunately, modern medical science offers new hopes to the man and woman of fifty. They need not necessarily accept the possibility that they will have heart trouble, kidney disease or high blood pressure when they grow older. Physicians know that these diseases are no longer inevitable. They can be avoided altogether. The main requirement by way of checking and preventing them is to consult one's physician while he is yet well, before the onset of any disease, and to have a physical going-over and checking-up at regular intervals. There is nothing formidable about this. It is the only sensible way known to insure lengthening one's life and to make the maturing years happy and profitable.

We take pride and find consolation in the fact that science has materially lengthened the span of life, adding

from 12 to 15 years to one's expectancy. But we forget that the gain has been made in the age bracket below 45, mainly in preventing infant deaths and in protecting the lives of children and young people. Thus far, little gain apparently has been made in the group above 50. The truth is, this age group through their disregard for health teaching and lack of interest in preserving their health at this valuable time of life are not only blocking a further extension to the average life span, but they are presenting a stubborn, major health problem.

We would not have you feel, however, that years and years alone, are the chief end of living, or the specific objective of health work. To quote Dr. C. E. A. Winslow, professor of Public Health at Yale University, "Health is not freedom from disease; it involves personal well being and wholesome living." It is this positive note, that health is a means to a higher end, and not an end in itself, that I would emphasize.

There is a certain admiration and distinction today for those who live to a ripe old age, regardless of the kind of life they have lived. Their long years are sometimes made the subject of nation-wide publicity and they themselves are sought out by the curious public. We prefer quality to quantity even in the number of years permitted to us to live, fewer years filled with service for others, love of family and friends, peace of mind, and a zest for living, rather than many years of dull, drab existence with only self at the center.

Obviously, not much more can be done toward lengthening life, but infinite are the possibilities of enriching it and making it worth the living. The oncoming of age is no longer a drawback to the acquisition and practice of some of the finest virtues.

Some persons, like good wines, get better as they grow older. That lovely mellowing that comes with the years can be noted in their characters as well as reflected in their faces. Irritability and impatience give place to a certain serenity and forbearance; selfishness gives way to charity, and unreasonableness to understanding and graciousness.

At no period of the world's history has old age been more generously considered or greatly favored. Old age pensions will relieve, it is hoped, to a great extent the anxiety and fear associated with growing old, for many people and becoming dependent. Science has made it possible for aging mouths, ears and eyes to continue functioning sufficiently; the automobile affords travel, recreation, and relief from monotonous situations; while the radio and the motion picture bring the world's best drama, news, and even the Gospel to one's own fireside.

The wise person will, while he or she is yet on the sunny side of life, take thought for the years beyond his three score year mark. He will strive to keep not only physically fit, but mentally young. Dr. Charles H. Mayo recently questioned the wisdom of prolonging the human span when nothing is done to prolong the virility of the mind. "The mind," he said, "must be treated with the same rules of care and exercise as the body. New interests, continued education, and variety will keep the brain up to the pace set by the fine and durable bodies with which science now endows even the aged."

So, to quote Clarence W. Lieb in the April number of *Hygeia*: "We should cultivate our best abilities and develop the work and ideas in which we are most interested. The better the quality of the mental storage leading up to the meridian of life, the

less we shall have to fear the onset of old age. The habit of stocking the mind with constructive philosophy, good music, poetry, facts and fiction will enable the aging person to draw on this accumulated knowledge, artistry and experience and become a wise counselor to the younger generation. Productive old age and the utilization of acquired knowledge and experience should be the aim of every human being. The mere attainment of old age is a worthless objective if linked up with this effort there is not a purposive struggle to conserve the spirit and mind of youth."

Since science and government are doing much to mitigate the ills that old age has always been heir to, is there not something we can do in our own lives to remove the clouds of fear and apprehension, and to make

"growing old gracefully" more than a pleasant sounding phrase? Can we not resolve with Charlotte Perkins Gilman, who says:

"To keep my health!
To do my work!
To live!
To see to it I grow and gain and give!
Never to look behind me for an hour!
To wait in weakness, and to walk in power;
But always fronting onward to the light,
Always and always facing toward the right.
Robbed, starved, defeated, fallen, wide astray—
On, with what strength I have!
Back to the way!

A Boon to Health and Long Life

THE provision of old age pensions is expected to do more than relieve financial anxiety and provide against old age dependence. It is already proving a boon to health and long life. Men and women are interested as never before in knowing how to live to reach sixty-five years. This interest has come about mainly because one of the regulations governing old age pensions has made the attainment of 65 years the point at which the pension becomes obtainable. Thus, a definite goal has been set, and the race now is to see if one can attain it, and have any years left in which to enjoy the prize.

Doubtless many questions arise in the minds of those who will be eligible to share in old age benefits. What are their chances for living to be 65? How many years beyond that age may they expect to live? What can they do to increase their chances for

living to 65 and beyond? They may be surprised to know that these questions can be answered fairly accurately, provided they are representative of the general average of the population. According to the life tables for the United States as prepared by the Statistical Bureau of the Metropolitan Life Insurance Company, a man of 35 years has 632 chances out of 1,000 for reaching 65 years, while a woman of the same age has 701. At the age of 45 a man has 676 chances, and a woman 739. At ages higher than 45, the chances increase with every additional year until at age 64, with only one more year to reach the goal, men have 964 and women 971 chances per 1,000.

Now that the age of 65 has been attained, how many more years may one expect to live? Will the goal be worth the striving? According to the same life tables, a white man

may expect to live 11.79 years after reaching 65 and a white woman may expect to live 12.83 years, which would make both live many years more than the span allotted by the Bible.

Another interesting fact brought out in the life tables is that rural people have materially better chances for reaching the age of 65 than their city cousins. For instance, the urban white male of 35 has 571 chances out of a thousand to reach 65, while the rural white male has 702, or a difference of 131 chances. For females, the corresponding figures are 663 and 752, respectively. The expectation of life after attaining 65 is greater also for rural people. For urban white males it is 10.80 years. For rural white males it is 12.73 years. For urban white females it is 12.36 years, and for rural white females it is 13.50 years. These figures reflect the familiar fact that women have a better chance to live to a ripe old age than men and that life taken as a whole is a little safer when lived in the country than when lived in the city.

It is heartening to know that the

above figures are flexible in individual cases. In other words, a person may increase his chances of living to be 65 beyond that of the general average of the population. Whatever he does to ward off heart disease, pneumonia, hardening of the arteries, kidney disease, cancer, high blood pressure and other degenerative conditions will be just so many factors favoring his chances. While he can do much by adopting a program of everyday living that avoids overwork, overeating, too little exercise and play, worry and excess of any kind, his best step would be to have a thorough physical examination once or twice a year. In this way he will be able to know his needs and meet them. His physician will be able to detect the onset of any condition while it is in the remediable stage. Persons around fifty will increase their chances for reaching 65 many times over, if they will take advantage of what medical science has to offer them. This is to be had through a regular physical examination once or twice a year by a competent physician.

Boils

EDUCATION and science have not yet been able to drive out the idea that "boils are good for you." Many people still believe that abscesses, pimples, boils, and carbuncles are nature's way of ridding the body of poisonous substances. But this is all wrong. Boils come not from within but without. They are caused by certain germs, usually of the staphylococcus group, which are nearly always on the skin of even healthy persons and which enter by way of the sweat glands, hair follicles, or some skin abrasion. They are localized infec-

tious processes in the skin.

People vary in their susceptibility to infection by these germs. Those in poor health are more likely to be troubled by this kind of germ infection than those who are in buoyant health. In general, it attacks those portions of the body offering least resistance. Uncleanliness, lowered vitality, chronic constipation, infections of the mouth and teeth, diseased tonsils and sinuses are conditions which predispose to infection. People suffering from diabetes and kidney trouble are likely to have pimples and

boils. In children suffering from malnutrition the germs may enter the bones, causing the disease known as osteomyelitis, or inflammation of the bone marrow.

When infection does take place nature at once begins to combat the invader by sending an extra supply of blood to the spot, causing a slight swelling, inflammation, and some pain. At this point the white cells of the blood attack the invading germs and unless there are too many, throw a protective barrier over and around them to prevent their spreading. When this is done, the pus which is composed of these white blood cells, dead germs and destroyed tissue, forms and accumulates in a sort of pocket. Later as development takes place this pocket breaks through, or it may be opened, and the pus is discharged. When all pus is removed, the boil begins to heal.

The greatest danger of spreading infection takes place when and where the pus is discharged. If the pus is allowed to come in contact with other parts of the skin, the result may be a "whole crop" of boils. The utmost care and cleanliness must be observed in dressing boils, particularly in emptying them of pus and disinfecting the affected areas, if the infection is not to be spread, with more boils the result.

Boils and pimples should not be squeezed. This destroys the protective wall around them and permits bacteria to enter other parts and deeper layers, sometimes causing carbuncles. Pricking with a pin or needle is apt to cause further infection. Patent medicines and tonics to purify the blood will not help. They may do harm. A good rule is not to interfere with boils until they come to a head. If they become exceedingly painful and demand treatment, see a doctor. It is especially dangerous to squeeze or "pick at" boils on or near the nose

since the drainage is back through the skull and meningitis may develop.

Concerning the germ which causes boils, pimples, abscesses and carbuncles, Dr. Herbert L. Herschensohn, writing in the August number of *Hygeia*, 1936, says: "The staphylococci can withstand terrific punishment without succumbing. They can be placed in boiling water for longer than a minute and remain alive. When frozen by being placed in liquid air for a period of 30 minutes, about half the number of germs will be found to be very much alive. Most of the other varieties of germs, no matter how deadly they may be, die when exposed to the direct rays of the sun; but not the staphylococci. They seem to be resistant to everything, even drying. They can often be found alive floating about on the dust particles of the most immaculate living rooms.

"They are the most common cause of boils and abscesses. The staphylococcus is also the most common cause of an infection of the bone which occurs particularly in children, the disease being known as osteomyelitis, or inflammation of the bone marrow."

Another important thing to remember about staphylococci is that alcohol as an antiseptic is practically worthless. It is better to use tincture of iodine or mercurochrome. However, soap and water will probably wash away more staphylococci than the antiseptic can destroy.

Boils are much more serious than most people seem to think and if improperly handled may lead to continuing "crops" of them as above stated or may even lead to serious and sometimes fatal internal abscesses in the kidneys, lungs, brain or other organs. In most cases the family physician should be consulted to advise and carry out the proper treatment.

Impaired Hearing in School Children

By WATT W. EAGLE, M.D., Duke Medical School

IMPAIRED hearing in children of school age causes considerable expense to taxpayers of local and state governments because many of the children have to repeat the same grade in school too frequently. Lack of adequate treatment in school age results in impaired hearing in adult life. The child, due to lack of care, does not always transform into a useful citizen and may still further be a source of expense to his government. One can see, then, the importance of early examination and treatment of children with any suspicion of impaired hearing.

There are numerous causes of impaired hearing in children. Scarlet fever, diphtheria, and influenza are notorious for causing a nerve type of deafness, for which there is not a bright future. There are other diseases—such as measles—which frequently are complicated by discharging ears. If the ear is allowed to drain for too long a period of time, there is a tendency for impaired hearing of a permanent nature to result, although the ear may stop discharging at some later date. There is always impairment of hearing of the conduction type in a chronic discharging ear. Foreign bodies and infections in the auditory canals also are causes of conductive type of impaired hearing.

The most common cause of impaired hearing in infants and school children is perhaps adenoid growths over the eustachian tube openings. These tubes run from the back of the nose up into the middle ear cavities. These adenoids not only cause impaired hearing by the growths over-lying the tubal openings, but cause repeated infections to pass through the tubes and extend into the middle ears. Infected tonsils, paranasal sinus infec-

tions and other upper respiratory infections passing through the tubes are causes of considerable middle ear infections, which in turn cause conductive deafness.

Some children with impaired hearing do not listen attentively, while others may be mal-nourished and generally run down; and one would naturally expect them to be below par in their school work. The ear function is sometimes a single manifestation of a generalized disease.

It is essential that early recognition of impaired hearing be made. School teachers may notice a hearing defect before the parents are aware of it. The most satisfactory method of determining any faulty hearing of children is during the early grades of school, when accurate tests can be made by means of an audiometer. This machine allows re-examinations at later dates of the children to demonstrate the improvements in hearing. During a test forty to sixty children can be examined simultaneously. Any child showing defective hearing should then be examined still further medically, and attempts made to restore the hearing. In those children in whom little hope may be extended in the improvement of hearing, at least the progress of the impaired hearing may be arrested. Some children may be moved to the front of the classroom and perform their work capably. They may early learn to read lips and certainly can become quite attentive while listening. Proper treatment for the children with chances of improvement, is guided by the physician and specialist.

By the audiometer test a large percentage of adult deafness can be prevented by adequate treatment of impaired hearing during the early stages in childhood. The earlier the treatment the better are the results.

Overweight Versus Long Life

OVERWEIGHT is now known to be a serious handicap to health and long life. So serious is it that certain life insurance companies have recently made special studies of it and its relation to mortality for the benefit of their policyholders and public health in general.

Interesting and challenging are some of the findings of these studies. One is that the greater the degree of overweight, the greater is the mortality rate. Men who are 35 per cent or more above average weight, have a mortality over one and one-half times that of average weight men, or an excess mortality of 60 per cent. Those who are from 15 to 24 per cent overweight have an excess mortality of 30 per cent. However, those but slightly overweight have a mortality only a little higher than those of average weight.

It was found that the most favorable build as regards mortality at the various adult ages in men is up to age 30, slight overweight; ages 30 to 39, average weight; ages 40 to 49, slight underweight; ages 50 and over, an appreciable degree of underweight.

The specified hazards of overweight, the study revealed, include nearly all the important diseases of adult life especially those of the arteries, heart, and kidneys. High blood pressure, for instance, is over two and one-half times as common among

overweights as among persons of average weight. The death rate of overweights from heart disease and cerebral hemorrhage is one and one-half times that of average weights and nearly twice that of underweights. Brights disease exacts a death rate among overweights one and three-fourths times that among average weight and two and one-fourth times that of underweight. The most striking difference of all is for diabetes, which for overweights is two and one-half times that for average weight, and four times that of underweight. The respiratory diseases are the only important ones that cause higher mortality among underweights. This is especially true of pulmonary tuberculosis.

Other interesting facts revealed in the studies is that the suicide rate is greater among overweights than among those of average weight, and the same is true of fatal accidents.

As important as it is to avoid overweight as a means to good health and long life, the advice was not to make the cure worse than the disease. Ill advised and haphazard methods of weight reduction may do more harm than overweight itself. It was emphasized that in any program to reduce that there be medical supervision, the use of a sensible and balanced diet, the avoidance of self prescribed drugs, and care not to lose weight too rapidly.

Lollipop Sticks May Be Dangerous Weapons

IT is not intended here to decry such simple delights of children as the lollipop, the popsicle, the creamsicle, the push-up and all those other candies and creams made to eat on a stick. It is the safety of the children

and not the candies that we are concerned with, and it is the stick, especially the sharp pointed stick, that we are warning against.

With the increasing sales of candies and creams on sticks, greater

becomes the liability of injury to children from these sticks. It is not uncommon for a child with a lollipop or all-day-sucker in his mouth to fall and injure his mouth or face. Fortunately, such injuries, while they frequently happen, have not all been serious. Some, however, have been serious, and a few fatal.

The Journal of the American Medical Association of January 16, carries an account of the death of a little boy who fell down with a lollipop in his mouth, the sharp stick penetrating the hard palate. He cried but there was no bleeding and the parents never discovered the site of the injury. Eight days passed and the little boy fell ill. Six days later he was dead in spite of medical treatment. Infection from the injury spread to the child's brain, with meningitis and encephalitis as the fatal result.

Many parents who ordinarily forbid a child to run about with a pencil or other sharp object in his hands or mouth apparently do not hesitate to allow him to do this with a lollipop or popsicle, not realizing that the stick, if he should fall on it, might or might not break and be forced through the cream or candy to penetrate his palate, pharynx, gums or cheeks. Various complications may arise as a result of injuries by foreign bodies in the mouth. In view of the extensive use of candies and creams on sticks among children, the greatest precaution should be taken by parents and nursemaids that those simple delicacies may not become the means of serious injury. Those with sharp pointed sticks should at all times be forbidden. All injuries in the mouths of children should receive immediate and thorough attention.

Rabies Examinations at State Laboratory 1932-1936

By JOHN H. HAMILTON, M.D., *Director, State Laboratory of Hygiene, and*
ROY NORTON, M.D., *Assistant Director, Division of Preventive Medicine*

SO many expressions of the opinion that "the dog heads sent to the State Laboratory are usually reported as having rabies" have come to our attention that it is considered worthwhile to correct this misconception. Usually just a little more than half are reported negative, although in only one year (1921) during the last twenty have the majority of those sent in been reported as positive.

Table I below, for the various animals, indicates that the relatively equal distribution of positives and negatives runs true, considering each animal or family separately. Only in cases of goats, sheep and humans is the reverse true and the number of those examined is too small to draw

conclusions. The figures for dogs and for the group calves, cows, bulls, oxen cover about an equal division between positive and negative results. It must be kept in mind that in many cases there really was little reasonable ground for suspecting rabies but the sender "just wanted to make sure in order to avoid worry about it."

Table II is of extreme interest to local communities but only the total state figures are sufficiently large to allow very definite impressions to be made. The general conclusion is that about half the reports are positive and half negative, with a very slight majority negative. During three years there were more negatives, during two there were more positive re-

ports. Those who live in Avery and Hyde Counties where all the reports for the five-year period were positive should check figures with Ashe, Camden, Dare, Graham, Tyrrell, and Yancey when all the reports were negative. It will be noted that in each of these cases the number of examinations made was very small and that the figures might have easily been reversed. In 51 counties there were more negative reports and in two (Madison and Randolph) the positive and negative reports were equally divided. Certain local influences may have some bearing as for instance, having the veterinarian, family physician or health officer advise regarding the heads to be sent, local interest or excitement at the time, and the available general information regarding proper procedures to be followed in the circumstances regarding each individual case.

It is perhaps well at this time to give a few reminders:

1. Most rabies occurs during spring and the cold months; not dur-

ing "dog days" of July and August.

2. All dogs should be confined inside fences or at least muzzled and held on leash except when otherwise serving some useful purpose such as hunting or tending domestic animals. The homeless stray dog and those allowed to run at large promiscuously constitute the chief reservoir and menace of rabies. The fact that a dog has recently been vaccinated is not sufficient justification for allowing it to run at large.

3. Stray dogs and those allowed to run at large promiscuously should be destroyed.

4. Owners should be held legally and financially accountable for damage inflicted by their dogs.

5. An animal suspected of having rabies should be immediately and safely confined (not killed) and a veterinarian consulted.

6. If a person is bitten, scratched or otherwise has his freshly abraded skin exposed to the saliva of an animal suspected of having rabies, the animal should be confined and the family physician promptly consulted.

TABLE I. RABIES IN NORTH CAROLINA—1932-1936 INCLUSIVE
BY TYPE OF ANIMAL BRAIN EXAMINED

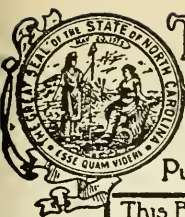
	Total		Mad	No Evidence of Rabies	Unable to Make Satisfactory Exam
1.	5,941	Dogs -----	2,777	2,859	305
2.	1,095	Cats -----	211	802	82
3.	217	Calves, cows, bulls, oxen -----	109	99	7
4.	52	Hogs -----	12	38	2
5.	39	Colts, mules, horses -----	12	26	1
6.	27	Squirrels -----	0	24	3
7.	19	Rabbits -----	1	17	1
8.	10	Rats -----	0	7	3
9.	6	Goats -----	5	1	0
10.	4	Humans -----	3	1	0
11.	3	Chickens -----	0	3	0
12.	2	Foxes -----	0	2	0
13.	2	O'possums -----	0	2	0
14.	1	Sheep -----	1	0	0
15.	1	Muskrat -----	0	1	0
	7,419		3,133	3,882	404

TABLE II. DOG HEADS EXAMINED FOR RABIES AT STATE LABORATORY OF HYGIENE—1932-1936

REPORT OF HYGIENE—1932-1936												
Pos.—Negri Bodies Typical of Rabies Found						Negative—No Evidence of Rabies Found						
1932		1933		1934		1935		1936		Total		
Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	
Alamance	10	19	8	18	21	16	29	21	27	19	95	93
Alexander	2	8	6	9	3	5	7	—	2	2	11	31
Alleghany	—	3	—	—	3	—	2	1	—	2	5	6
Anson	—	6	2	3	8	—	11	11	5	4	26	32
Ashe	—	1	—	—	—	1	—	—	—	—	0	2
Avery	2	—	—	—	—	—	1	—	—	—	3	0
Beaufort	14	3	11	8	13	6	5	1	1	5	44	23
Bertie	1	—	—	2	4	2	14	2	4	1	23	7

TABLE II.—(Continued.)

	1932		1933		1934		1935		1936		Total	
	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.
Bladen	6	3	9	4	2	5	1	3	1	--	19	15
Brunswick	--	3	4	--	2	1	--	--	--	1	6	5
Buncombe	7	6	1	11	2	8	25	20	30	27	65	72
Burke	4	3	2	8	4	7	7	13	1	5	18	36
Cabarrus	--	14	7	11	6	19	6	18	2	6	21	68
Caldwell	2	4	14	12	8	6	7	12	--	6	31	40
Camden	--	--	--	--	--	1	--	--	--	1	--	2
Carteret	--	--	--	1	--	3	--	1	--	1	--	6
Caswell	1	1	1	1	--	1	5	3	1	3	8	9
Catawba	1	1	9	3	16	11	13	8	4	2	43	25
Chatham	--	2	2	--	3	6	9	2	7	4	21	14
Cherokee	--	1	--	1	--	1	--	1	3	1	3	5
Chowan	--	1	--	1	--	1	1	--	--	--	1	3
Clay	--	2	--	4	1	--	--	1	5	4	6	11
Cleveland	4	5	8	3	8	13	4	8	1	4	25	33
Columbus	6	3	12	5	5	2	6	4	1	5	30	19
Craven	5	2	3	4	2	3	6	2	4	3	20	14
Cumberland	4	9	29	13	21	12	24	23	3	10	81	67
Currituck	--	3	1	--	--	--	--	--	--	1	1	4
Dare	--	1	--	--	--	--	--	--	--	--	--	1
Davidson	2	9	5	7	9	19	10	34	9	17	35	86
Davie	1	11	3	5	1	3	2	3	--	--	7	22
Duplin	10	4	10	11	15	8	9	4	1	7	45	34
Durham	1	7	1	4	10	3	21	10	14	19	47	43
Edgecombe	11	11	10	16	14	10	17	15	8	5	60	57
Forsyth	1	2	1	2	3	--	2	3	--	2	7	9
Franklin	3	1	2	4	13	7	20	11	--	4	38	27
Gaston	2	9	2	6	22	20	13	15	1	8	40	58
Gates	2	3	--	1	1	3	2	4	1	3	6	14
Graham	--	--	--	--	--	--	1	1	--	--	--	1
Granville	1	5	2	1	7	1	9	3	2	2	21	12
Greene	1	1	--	2	6	4	7	1	--	2	14	10
Guilford	3	18	5	15	17	33	73	51	78	60	176	177
Halifax	8	4	14	8	30	14	16	12	4	4	72	42
Harnett	1	7	5	8	3	10	17	23	11	13	37	61
Haywood	1	2	--	1	4	3	5	6	5	5	15	17
Henderson	--	4	--	3	15	9	6	3	1	4	22	23
Hertford	1	2	--	1	7	4	4	1	2	--	14	8
Hoke	1	--	1	8	1	5	2	3	1	2	6	18
Hyde	--	--	--	--	1	--	--	--	--	--	1	--
Iredell	15	22	17	15	4	12	1	9	1	18	38	76
Jackson	--	--	--	--	--	--	2	--	--	1	2	1
Jackson	5	8	6	9	17	4	24	12	6	11	58	44
Jones	4	--	--	1	1	--	--	--	--	1	5	2
Lee	1	1	--	3	1	3	14	9	9	6	25	22
Lenoir	14	3	6	3	15	8	10	5	7	11	52	30
Lincoln	1	6	1	3	2	1	3	6	1	2	8	18
McDowell	7	6	4	8	5	15	8	5	1	4	25	38
Macon	--	--	1	2	--	2	--	--	6	2	7	5
Madison	1	--	--	1	1	2	5	1	2	5	9	9
Martin	1	1	5	6	12	5	5	1	3	1	4	20
Mecklenburg	--	1	3	5	3	2	1	--	1	4	8	12
Mitchell	11	2	--	1	--	--	2	2	--	--	13	6
Montgomery	--	5	--	4	--	6	5	5	7	12	12	32
Moore	2	3	2	3	5	1	16	5	9	5	34	17
Nash	5	8	2	7	13	9	11	5	1	10	32	29
New Hanover	2	3	15	3	7	7	13	5	2	5	39	23
Northampton	--	--	--	4	10	6	11	4	--	--	21	14
Onslow	3	--	2	1	1	1	3	1	--	--	9	3
Orange	1	2	--	6	11	10	12	14	7	6	31	38
Pamlico	--	--	1	--	3	1	1	--	--	--	5	1
Pasquotank	1	1	--	--	1	1	3	1	1	1	5	4
Pender	4	1	8	2	7	4	6	3	1	1	26	11
Perquimans	2	5	1	3	1	1	1	--	5	--	10	14
Person	--	1	1	2	5	2	5	--	--	--	11	7
Pitt	6	4	4	10	21	13	22	10	--	8	53	45
Polk	1	3	--	--	4	1	1	3	1	5	7	12
Randolph	2	4	1	4	5	4	20	19	9	6	37	37
Richmond	3	2	9	5	4	7	6	1	16	5	38	20
Robeson	10	13	25	20	23	15	7	14	12	6	77	68
Rockingham	3	8	13	5	13	7	20	14	21	18	70	52
Rowan	6	7	35	12	7	9	--	6	7	8	55	42
Rutherford	13	11	13	6	3	4	5	4	3	4	37	29
Sampson	8	3	13	5	3	5	6	8	1	5	31	26
Scotland	3	4	8	2	4	6	10	2	2	3	27	17
Stanly	2	2	4	2	1	4	10	4	1	4	18	16
Stokes	2	2	--	2	--	3	--	--	2	2	5	9
Surry	1	5	3	17	6	16	11	21	10	14	31	73
Swain	--	--	1	--	1	1	--	4	1	--	3	5
Sylvania	1	2	--	--	--	--	1	3	2	2	4	7
Tyrrell	--	--	--	--	--	--	--	2	--	--	--	2
Union	1	5	2	7	5	6	3	4	1	6	12	28
Vance	--	1	--	6	12	8	21	6	1	7	34	28
Wake	9	39	9	37	105	82	120	76	36	57	279	291
Warren	2	1	6	1	7	1	10	4	--	2	25	9
Washington	2	2	6	1	--	5	1	5	--	2	9	15
Watauga	--	--	--	--	--	1	1	--	--	2	1	3
Wayne	4	10	3	15	37	19	26	18	2	15	72	77
Wilkes	1	2	4	12	9	15	7	9	1	5	22	43
Wilson	5	10	--	3	22	13	22	16	3	9	52	51
Yadkin	1	1	1	--	1	3	--	2	--	--	3	6
Yancey	--	--	--	--	--	--	--	--	--	1	--	1
	285	424	425	489	728	644	900	717	439	585	2777	2859



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Miss Josephine Sharkey
Chapel Hill, N. C.

Miss Sharkey is a successful Foster Mother. Last winter a 100% successful Grade Mother in the Chapel Hill School, a student of nutrition and President of the Orange-Durham Mental Hygiene Society.

(See article beginning on page 3)

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The following special literature on the subjects listed below will be sent free to any citizen of the State on request to the State Board of Health, Raleigh, N. C.

Prenatal Care	Baby's Daily Time Cards: Under 5 months;
Prenatal Letters (series of nine monthly letters)	5 to 6 months; 7, 8, and 9 months; 10
The Expectant Mother	11, and 12 months; 1 year to 19 months;
Breast Feeding	19 months to 2 years.
Infant Care. The Prevention of	Diet List: 9 to 12 months; 12 to 15
Infantile Diarrhea	months; 15 to 24 months; 2 to 3
Table of Heights and Weights	years; 3 to 6 years.
	Instructions for North Carolina Midwives.

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Going Back to School

By THE EDITOR

On the front cover this month, we are publishing a picture of Miss Josephine Sharkey of Chapel Hill, North Carolina. It will be remembered by most of our readers that in the fall of 1936, Miss Sharkey was chosen by the Parent-Teacher Association of the public schools of Chapel Hill as Grade Mother of the third grade. It will also be remembered that Miss Sharkey adopted a baby at four weeks of age some years ago. We published this baby's picture on the front cover of the Health Bulletin for July, 1931. This baby was then 100% perfect physically and mentally. We published this little girl's picture, Hilda Sharkey, in our issue of May, 1937. Again this child on an inspection by competent physicians rated 100% perfection physically and mentally.

Soon after Miss Sharkey assumed her duties as grade mother, she announced to all concerned that she was not one of the sit down kind. To begin with, she proceeded in the only sensible and logical manner possible. She secured the cooperation of the Health Officer of the Orange-Person County Health District, Dr. W. P. Richardson, for a careful examination of all the pupils in that grade. This was done by Dr. Richardson and one of the nurses in his department. Of the twenty-nine children enrolled in the grade and examined by the Health Officer, only six of them were

rated as 100%, according to the accepted standards for physical and mental development. Decayed teeth, malnutrition, diseased throats, underweight, and many other conditions were found to be present, all of which were preventable, among the twenty-three children who did not come up to the standards of the six perfect specimens.

Miss Sharkey went to work. She followed each child home from school at one time or another. She made friends with the parents. She laid the problem down before them, and what is more, she had her own foster daughter as a living example that she was able to speak with authority. To make a long and interesting story into a very short one, just before the conclusion of the school in May, 1937, another examination by the Health Officer revealed that every child in the grade had been brought up to a 100% standard. In reality this was one of the most remarkable accomplishments that has been executed in the State of North Carolina in a long time. Her efforts and those of the friends and parents who cooperated, together with the children themselves, created a great deal of interest throughout the state, and justly so.

We are publishing on the outside back cover of this issue of the Health Bulletin a group picture of these children. It is a living exhibition of

what can be done in any school in North Carolina, if there is only one interested and aggressive person who is willing to do the work and make the sacrifice, if necessary, to produce such results.

Miss Sharkey has made the point that her little foster daughter, Hilda's, health is not a "happen so." From the time Miss Sharkey took her at four weeks of age, she had definitely planned and carried out a program for every minute of the twenty-four hours, and what is more, she carried out the program to the letter and has done so every day now for more than seven years. She was a well baby when Miss Sharkey took her, with the exception of one defect and that was a tendency to rickets. Had the baby fallen into less tender hands, the story would have been quite different.

We understand that there is a movement on foot by some of the patrons of the Chapel Hill school to make provision for Miss Sharkey to undertake to carry on in the lower grades in the Chapel Hill school this winter the same kind of a program that she put on for the third grade last year. If such a program as that could be carried on for four or five years, the results would be astounding to most of our own complacent parents and citizens, and think what it would mean for the children who would be the beneficiaries.

In a letter from Miss Sharkey some time ago, she expressed so many good ideas in such short space that we are letting her finish this editorial:

"First, some ideas for the 'Going back to School' number of the Health Bulletin. We must not forget that we are sending the child's body as well as his mind to school and some sort of provision should be made in the school hours for the needs of this growing body that we may

not violate the normal development of the child's nervous system and body while we are teaching him the fundamentals of the 'three R's'. A straight spine and a well nourished body capable of resisting infection and protected wherever possible by immunization from contagious diseases may stand him in better stead in the long run than the ability to do a problem in mathematics or write a theme on North Carolina history. Particularly is this true in the lower grades when the growing body craves activity and we keep them at desks for five hours a day with often no respite except a short play period and this play seldom supervised by a trained teacher of physical education.

"Have we not grown to accept a very low standard of physical health as normal?

"What the best and wisest parent desires for his child should be the community goal for all children.

"Has any thorough research been done on the 'repeaters' in school who have struggled year after year against physical handicaps which could have been corrected in the first year of school or after the PTA summer round-up before they entered school? Did you know that in the research done this winter on children in Chapel Hill who were having difficulties in reading 67% of them were found to have defective vision? This research was done by Miss DeBerry of the Salisbury, North Carolina, schools and is available, I am sure, if you write her. Promotion from grade to grade must rest primarily on reading ability and one of the children so examined had repeated five grades. It is hard for a thirteen year old boy to be in the class with eight year olds and to be moved further and further back in the class room because he is so tall while all the time the words in his book and the ones on the board are becoming more and more fuzzy. Is it any wonder that he is in a fair way to becoming a behavior problem and potential delinquent?

We all desire our share of success in this world and if we cannot have it in the world of our school and neighborhood, and if we are called 'dumbbell' too often, is there any wonder that we try to gain the center of the stage in ways that are not socially desirable and come up against the law before we are through?

"I have sat for hours in children's clinics in New York to which children who were becoming problems in school and in the neighborhoods were brought and where youngsters were taken

from the juvenile courts. The wise doctor heading up this clinic looked at the whole child, not just the things that were bothering folks and about seventy five per cent of them had physical difficulties which cleared up the whole trouble if taken in time. I cannot help but think that North Carolina would save money in the long run by devoting more time to health education right up through the grades and high school and teacher training institutions instead of having it poked off in a corner like a step child."

Argument for Full Time Health Department in Rockingham County

For more than ten years it has been something of a puzzle to the officials of the North Carolina State Board of Health as to why Rockingham County, a county of more than 50,000 population and more than 40 million dollars taxable wealth and a comparatively small bonded indebtedness, has persistently refused the organization of a full time health department. Some of the mystery in that situation has recently been cleared up. We refer to the action of the Rockingham County Medical Society in a call meeting voting eight to four against the organization of such a department. This action confirms the opinion of this writer in that physicians as a pressure group exert more influence than any other single group in the population. No one could blame the Board of County Commissioners for following the advice of the physicians of their county in matters bearing upon the health of the people of the county. We are glad to know where the responsibility lies, but we regret that a county medical society has assumed the unenviable position of causing the county not to have a health department.

Following the action of the physicians, Mr. Upton G. Wilson, who conducts a daily column in the Reidsville Review, under date of July 25, presented arguments so logical, sound, and so good in every way that we publish it in full below. He sets forth in a few words the conviction of the writer that a properly conducted and efficiently manned health department with a physician as whole time health officer benefits practicing physicians as much as or more than any other element of the population.

The article follows: "In placing its ban upon a full time health department for its county the Rockingham County Medical Society repudiated that which approximately 80 of the state's 100 counties have found desirable. Rockingham is one of approximately 20 counties without full time health service. Are the 80 wrong and the 20 right or are the 20 in error?

"As a layman, we are not in position to answer our question. We do not presume to place our knowledge against the knowledge of some dozen or more of the county's doctors. But it has been our observation that the

best possible argument for anything is the thing itself. For example, the short stretch of rock road Rockingham county built some three decades ago converted the whole county to the idea of good roads. Similarly the first two or three good schoolhouses built in the county converted our people to the idea of better schoolhouses.

"A good, full time health department in the county, we make no doubt, would convert our people to a better realization of the importance of health and that instead of using private doctors less they would use them more. And with more use being made of the services of the county's doctors it is reasonable to assume that both the people and the doctors would profit. People call in

doctors to help them, not to hurt them.

"Thus it appears to us that physicians of the county in opposing a full time health department not only oppose what is best for the people but what is best for them. A full time health department would make the people more health conscious, just as good roads have made them more road conscious, and undoubtedly many who have been getting along without doctors would make use of their services.

"Certainly a full-time health department cannot hope to cure all human ills. There'll always be work for doctors to do. A health department will merely disclose ills, leaving private doctors to cure them."

Arsenical Poisoning

Under the above title we reproduce below a brief newspaper report coming from the Louisiana State Board of Health. That state's pure food and drug laws are executed by the State Board of Health. It will be seen by reading the item that they require that all poisonous compounds used as insecticides must be colored so as to make it easy for the purchaser to tell the difference between these poisonous preparations and flour or other food ingredients.

As the pure food and drug laws in North Carolina are executed by the State Department of Agriculture, and as there have been one or more deaths from the mistaken use of such poisonous drugs in this state, this year, we respectfully pass this suggestion along to the Department of Agriculture in the hope that they will require a like procedure in this state.

"Because of recent cases of arsenical poisoning in the state, C. L. Clay, State Chemist of the Louisiana State Board of Health, yesterday issued a warning to manufacturers of insecticides or other poisonous compounds resembling flour or other food ingredients to color them so that they may not be mistakenly used in the preparation of food.

"This treatment is required, Mr. Clay pointed out, under terms of Regulation No. 33 of the State's food and drug laws and violations are punishable by fine, imprisonment and destruction of the offending product, and will be rigidly prosecuted.

"Calcium arsenate, which in an uncolored state resembles flour, is frequently used for it in baking bread and may result in the death of the person consuming it.

"'Dealers do not keep on hand a sufficiently large stock of colored compounds of this character,' Mr. Clay said. He urged a uniform national law requiring manufacturers to adopt the color method of differentiation."

Twenty-Five Years in Bed

Readers of the Health Bulletin will remember that in April, 1935, we published a picture of Mr. Upton G. Wilson of Madison, North Carolina, on the front cover of that issue. We said then that his life had been an inspiration to the handicapped everywhere.

In the *Reidsville Review* of July 25, Mr. Wilson has the following to say about the completion of twenty-five years in bed. Any reader whose eyes should chance to fall on these lines and who has been in the habit of complaining about trivial things would do well to read his statement and try to grasp something of his secret of happiness:

"Tomorrow night at 8 o'clock I will have completed 25 years in bed. That is two years more than I had lived before a spinal injury doomed me to lifelong invalidism. These 25 years have not seemed long nor have they brought unbearable suffering.

"Sometimes it seems to me that my life really began with my invalidism. More than once I have confused my birth date with the date of my injury, the former being the sixth of July and the latter the 24th. Really I have had two lives, one as a

person in normal health and the other a prisoner to my bed.

"In a way, perhaps, I have been fortunate in being permitted to have these two distinct and, as it seems to me, separate existences. You may wonder what good fortune there is attached to life in bed. Well, for one thing, after an interval of mental and physical pain, happiness.

"Like gold, happiness is where you find it, and you can find it in bed if you look for it industriously enough.

"You begin your search for happiness by trying to merit the unceasing, unselfish love and care of devoted relatives and friends. You try to play fair with them by smiling when they smile, by refusing to complain of your lot when they do not complain of theirs. That is the way you find happiness in bed.

"Something to do also helps, even if what one does, as in my own case, amounts to very little. One finds his greatest reward in work rather than in the importance of his work. At least, I have found this to be the case.

"There is no copyright on this recipe for finding happiness. Those out of bed as well as those in bed may use it if they wish. If it doesn't help them it won't hurt them."

Suggestions for the Lunch Box

By MRS. J. HENRY HIGHSMITH

Since it will not be practical for all of North Carolina's school children to have lunch at school this winter, it will be necessary for many of them to carry lunch from home. Following are a number of suggestions for properly preparing the lunch and making the food meet the health needs of the child:

1. Select the container, box, basket or pail that can be kept clean,

and that will keep the food dry and free from insects, dust and dirt. It should permit the air to circulate through it freely, yet keep out flies and ants. The type of box equipped with a thermos bottle for taking hot soup or chocolate in winter and cold milk, orange and tomato juice in summer is desirable.

2. In general, every lunch should include a meat or its equivalent,

bread, a fruit or vegetable, either fresh or cooked, a sweet and a beverage.

3. Sandwiches may compose the foundation for the lunch, but by no means should they always be the stereotyped bread and meat variety. Tasty sandwiches can be made of nuts and cream cheese, nuts and dates or raisins, jelly, peanut butter, chopped eggs, and many other wholesome combinations.

4. Lunches may be varied by substituting for the usual sandwich a salad, a dessert, or some semi-liquid food like custard or stewed fruit. These may be placed in small glass jars with tight fitting covers. Jars in which mayonnaise, peanut butter or jam are sold, make excellent containers for desserts.

Bread and Meat	Fruit or Vegetable	Dessert	or	Sweet
Chicken sandwich	Celery	Rice pudding		Dates
Minced ham sandwich	Whole Tomato	Tarts		Figs
Chopped egg sandwich	Orange	Oatmeal crackers		Jelly or preserves
Jelly sandwich	Apple	Gingerbread		Sweet chocolate
Peanut butter sandwich	Banana	Fruit gelatine		Cocoanut
Chopped dates and nuts	Grapes	Baked custard		Raisins
Graham muffins—deviled egg	Pears			
Corn bread—chopped	Peaches	Cookies		
bacon filling		Chocolate pudding		
Cheese sandwich	Raw carrots			

Cheese used with nuts or fruits such as pineapple, dried apricots, peaches and apples offer a variety of appetizing and nourishing sandwiches. Lettuce used in making meat,

5. Use wax paper for wrapping sandwiches and keeping the different kinds of food separate. Thus by the flavor of the foods not mixing, the lunch is made more attractive and more appetizing.

6. Paper napkins, paraffin covered paper cups, and cardboard spoons and forks—the kind used for picnics—are useful accessories for the lunch box.

Instead of enumerating typical menus, a list of foods suitable for lunch boxes is given below. Foods which go well together and provide proper balance are listed across the page, but other combinations may be made. A beverage, such as milk or cocoa is taken for granted, and judgment is expected in making combinations.

egg and tomato sandwiches will add much to the tastiness and value of the lunch provided the lunch can be kept in a cool place until time to eat.

The School Lunch Problem

By MRS. J. HENRY HIGHSMITH

Following a better understanding of the relation of diet to disease, of malnourishment to ill-health and inefficiency, more and more attention is being given to the food and eating habits of school children. No good school of today fails to consider the nutrition needs of its pupils. Too vital and too unmistakable has been found the relationship between failure in school, ill-health, backward-

ness and truancy, and a long, deep-seated hunger. Educators are beginning to ask what gain is there in trying repeatedly to teach the half-starved boy or girl whose mind and body no longer function normally, for lack of proper and sufficient food.

There's no denying the fact that providing proper food for children and supervising their eating habits is a problem, even if well managed,

for the average home, to say nothing of what it becomes when taken to the school and made to apply to several hundred children. However, it is a problem which the schools are finding they cannot afford to overlook. The reason is, a well-fed, healthy, happy child is taught more easily. He learns more rapidly. He adjusts himself more readily to the school program and to community life. He is not a problem. On the other hand, a child suffering from hidden hunger is likely to be a diseased child, defective in some sense organ, or debilitated so as to be liable to infectious diseases. Furthermore, he is likely to be a misfit. If he fails to make his grade from year to year, he soon becomes discouraged, and drops out. At this stage, some children develop anti-social tendencies, and some few are later found with court records.

Many North Carolina schools are today faced with the school lunch problem. A check made last year of the annual reports of the 750 white high schools in the State showed that only 370 or a little over half operated school lunch rooms or cafeterias. Of the 370 cafeterias listed, 311 were classified as being operated by rural schools and 61 by city schools. It is interesting to note that the schools operated 189 or 51 per cent of the cafeterias, while the local Parent-Teacher Association sponsored 80, or 22 per cent, and the FERA 51, or 14 per cent. The Woman's Club, it was found, operated 9, while 30 or more were privately operated.

While no estimate has been made as to the number of elementary schools which provide cafeteria service, it is reasonable to believe that the percentage of these is no higher than that of the high schools. Consequently, for at least half of the school

children of the state no provision for the noonday school lunch has been made.

The ideal plan is to have the school itself operate the lunch room or cafeteria where a hot, nourishing lunch can be served every school child who wants it, and especially those who need it, even though they cannot pay. A paid director should be in charge, and should have assistants who may be furnished by the NYA or WPA or they may be self-help students. The director or supervisor may be the Home Economics teacher, but in that case she should have a cook and adequate help, and not be expected to manage the cafeteria and keep up her class work at the same time. Neither should the pupils studying home economics be expected to do the work that is required daily in a lunch room or cafeteria.

Most city school systems have these provisions, and find that, due to the large number served daily, a lunch room can be operated on a self-paying basis with many decided benefits to the school. As desirable and beneficial as lunch rooms are for city schools, they are even more desirable for rural schools. Where the pupils have to leave home early and go long distances, a hot lunch is almost a necessity, if sufficient strength and energy are to be had for the work of the day.

One rural school of about 125 pupils and five teachers, at Colfax, North Carolina, has demonstrated that the school lunch problem can be met and solved satisfactorily and at little cost. The way this school managed it was to convert a former classroom into a lunch room by having the school carpenter build in a counter, several cabinets and a number of long tables and benches. A partition of screen wire separated the service area of the room from

the space where the food was prepared. Equipment of dishes, knives, folks and spoons, and cooking utensils for serving thirty six pupils at one time or an average of 75 daily, by having two lunch periods, was bought. The entire cost of providing the lunch room and its equipment was \$250.00. In this school the home economics teacher supervised the buying, preparation and serving of the food, but under her was a paid cook and one or two NYA helpers, also several students who paid for their lunches by assisting with the serving. The principal, Mr. W. H. Cude, or the Home Economics teacher, Miss Martha Sample, will furnish further information on how the rural elementary-high school may successfully handle the school lunch problem.

If it is found impossible for a school management to provide a full hot lunch during the winter months of school, the next best thing is to serve a hot beverage to accompany the pupil's cold lunch brought from home. This can take the form of hot soups—vegetable or cream—hot cocoa, bouillion and milk. It takes little equipment for this service and can be served in the separate class rooms. In the warmer months, ice cream, cool drinks of fruit and vegetable juices, and in every case, milk, can take the place of hot beverages.

Many rural schools have found it practical to operate lunch rooms on a cooperative basis. The children furnish the fruits, vegetables and meats, and the school or some civic organization employs a cook or matron to prepare and serve the food. By the pupils helping with the work, they receive valuable training in addition to their noonday meal. Parent-Teacher Associations, Women's Clubs, Civic organizations such as the Kiwanis, Rotary, Civitan and Lion's Clubs, have all shown a willingness to help in such worthy enterprises.

Another reason why every up-to-date school should operate a lunch room is its educational value in the community. Here children learn proper food combinations and what constitutes a wholesome diet. They become acquainted with new dishes, new ways of preparing and serving food, food sanitation, and table manners. They form new tastes and learn to like new foods, all of which help to meet their food-health needs. These new ideas and practices find their way into their homes and soon their families are preparing and serving food a-la-school-cafeteria style, which is a great improvement on the style which prevails in the average rural home.

Better no cafeteria service, however, than to sell candy and package grocery store cakes as the principle items.

Parents Are Warned Against 'Scrub' Youth

"Producing good crops and livestock is little more than an empty mockery if at the same time you are raising scrub boys and girls.

"Give your boys and girls a chance to grow into capable men and

women," R. E. Jones, Negro 4-H club specialist of the State college extension service, urged a group of Orange county Negro farm men and women attending a 4-H club picnic a few days ago.—*The News*, Hillsboro, N. C.

Regulations Governing the Impounding and Maintenance of Impounded Waters in North Carolina

WHEREAS, under provisions of the statutes of the State of North Carolina, the State Board of Health is authorized and empowered to adopt what in their judgment seem to be necessary rules and regulations for the management, supervision, or control of preventable diseases in the State,

NOW, THEREFORE, the following rules and regulations are hereby adopted in order to prevent the introduction or spread of malaria as a result of the impounding of water:

Section 1. Definitions.

The term "impounded water" means: Any body of water formed by the construction or excavation of a basin or the obstruction of stream flow in such a manner as to cause the collection of a body of water which would not have formed under natural conditions. Such impounded waters of less than one acre of water surface, used exclusively for watering livestock or for other domestic purposes, are not included in this definition.

The term "person" means: Any individual, firm, corporation or governmental agency owning or otherwise directly responsible for the area to be impounded; or the agent, representative or lessee of such individual, firm, corporation or governmental agency.

The term "State Board of Health" means: The North Carolina State Board of Health or its authorized representative.

The term "control measures" means: Any measures approved by the State Board of Health which are used in the prevention or control of

malaria. These measures include fluctuation of the water level, removal of flottage, removal of drift, removal of aquatic or other growth, application of larvicides, screening, or any other measures effective in the control of malaria.

The term "flottage" means: Any appreciable collection of small material on the surface of impounded water, such as leaves, chips, bark, small twigs, grasses and the like, which may provide breeding conditions favorable to malaria-carrying mosquitoes (*Anopheles*).

The term "drift" means: Any large materials on the surface of impounded water such as logs, brush, and the like which may collect and hold flottage or otherwise produce conditions favorable to the production of malaria-carrying mosquitoes.

Section 2. Any person, proposing to impound water, raise the level of existing impounded water, or reimpound water in areas where previous impoundage has been discontinued for one or more seasons, shall, prior to the institution of any construction activities, make written application to the State Board of Health and receive therefrom a written permit for impoundage construction.

Section 3. An application for a permit shall be made on the approved form furnished by the State Board of Health and in the name of the person making application, and shall be accompanied by a description of the proposed project, its purpose, and its exact location; also by an accurate plat of the area to be affected, showing particularly the maximum and minimum water levels of the pro-

posed impounded water and other information required by the State Board of Health.

Section 4. Such permit shall be issued by the State Board of Health when compliance with the following rules and regulations has been assured:

(a) The person responsible for construction shall carry out such measures as may be prescribed by the State Board of Health, for preventing the introduction of malaria through infected employees coming from without the reservoir area or its environs.

(b) In the area to be occupied by the impounded water, all brush, trees, undergrowth, logs, stumps and other objects, which if not removed, would float or collect flottage on the surface of the impounded waters; and all of the above material that is lying on the ground, or remaining in original or new position, which would probably cause collection of flottage, and thus constitute conditions favorable to the production of malaria-carrying mosquitoes, shall be removed, burned, or otherwise satisfactorily disposed of, prior to the impounding of the water.

PROVIDED that the above does not include grass, vegetation, brush, trees, stumps, etc., which will be permanently and completely submerged at times of low water and which are, therefore, not of sanitary importance.

(c) In the area to be occupied by the impounded water all trees and other growth which would pierce the surface at minimum low water level shall be cut off at least one foot below such water level, to prevent the collection of drift or flottage.

(d) The shoreline of the impounded water from minimum low water level to a line ten feet horizontally outward from normal high water level, shall be cleared of all brush,

trees, undergrowth and any material which may cause the collection of drift or flottage, except when specifically exempted in writing by the North Carolina State Board of Health.

(e) Any area which will be covered by impounded water at the time of maximum water level and in which water will be retained at lower stages of the impounded water, thus forming a separate pool, shall be connected with the main body of the impounded water by a ditch or culvert which will permit effective drainage or access by boat.

(f) In the designing and construction of the impoundage project, flashboards or other means shall be provided for controlled fluctuation of the water level at any season of the year in the manner and amount as specified by the North Carolina State Board of Health, or by other methods approved by the State Board of Health.

(g) In the designing and construction of the impoundage project, bottom drains or other means shall be provided which will permit removal of the impounded water.

PROVIDED that one or more of the provisions of this Section may be waived in whole or in part when, in the opinion of the State Board of Health there are factors or circumstances which render compliance with such provisions unnecessary.

Section 5. The State Board of Health shall make inspections of the impoundage project from time to time and shall approve in writing such portions of the work required under Section 4 which have been satisfactorily completed.

Section 6. Any person holding permit for construction, prior to the actual impounding of water, shall give written notice to the State Board of Health and certify that all require-

ments for said construction have been fully performed.

The State Board of Health shall issue a permit for the impounding and maintenance of impounded water when it finds that such construction has been completed in accordance with plans approved by the State Board of Health.

PROVIDED that any filling of the reservoir shall not occur during the malaria-carrying mosquito breeding season, namely, April to September inclusive, unless otherwise authorized in writing by the State Board of Health.

The continuance of said permit for impounding and maintenance of impounded water shall be contingent upon the application of control measures satisfactory to the State Board of Health. These control measures may include one or more of the several methods currently recognized by the State Board of Health and the U. S. Public Health Service as being effective in the control of malaria.

Section 7. The person responsible for the maintenance of impounded water shall from time to time furnish the State Board of Health with reports of operation, maintenance or condition of the impounded water, as may be specified by the State Board of Health. Such records as contain the information required, as aforesaid, shall be open to inspection by the State Board of Health.

Section 8. The State Board of Health from time to time shall make inspections of the impounded water as are deemed advisable; and any conditions found which are, or may be, conducive to the production of malaria-carrying mosquitoes, or likely to cause an increase in malaria, shall be corrected by the person holding permit for impounding and maintenance of impounded water, in a manner found necessary for preservation of public health by the State Board of Health.

Section 9. Impounded water existing at the time these regulations become effective shall be subject to such reasonable rules and regulations for the control of malaria-carrying mosquitoes resulting from such impoundage as may be adopted and promulgated by the State Board of Health.

Section 10. Violation of these regulations of the State Board of Health, made by and in pursuance of the laws of North Carolina, shall constitute a misdemeanor punishable upon conviction by a fine or imprisonment or both, in the discretion of the court.

Section 11. Should any part or parts of these regulations be declared invalid for any reason, the remainder of said regulations shall not be affected thereby.

Adopted by the North Carolina State Board of Health in regular session May 5, 1937.

The Right of Every Child to See

By MRS. J. HENRY HIGHSMITH

Outstanding among human rights is the right to see. This God-given gift is often denied persons through no fault of their own. What is more thought-provoking, three-fourths of the blindness in this country could

have been prevented. That is, 90,000 of the 120,000 blind persons in the United States need not have been blind.

A study of the causes of blindness reveals that accidents in industry

cause about 100 persons to go totally blind each year. About 300,000 other persons suffer the loss or the serious impairment of sight in one eye.

Accidents involving fireworks, air rifles, jackknives, scissors, fishhooks and other playthings of children carelessly used are responsible for another large group, mostly of children, being made blind.

Heredity, especially where persons who are disposed to blindness marry and transmit the disposition to their children, is said to cause about one-fourth of all blindness.

Another cause, hideous in all its manifestations, is syphilis. At least 15 per cent of all loss of sight is attributable to syphilis, both congenital and acquired. Blindness from this source, however, can be entirely wiped out. Acquired syphilis can be accurately diagnosed in its early stages, and through long and intensive treatment can be arrested. Congenital syphilis can also be brought under control through systematic treatment.

Fortunately, the attack on this cause of blindness has already begun. There is now hope that blindness caused by syphilis will be brought under control as blindness from that other venereal disease has been. Fifty years ago, ophthalmia neonatorum, or "babies' sore eyes," caused by gonorrheal infection at the time of birth was the largest single cause of blindness in children. By requiring that a silver nitrate solution be instilled in the eyes of newborn babies, the rate of blindness from this disease has been reduced from 40 to 7.5 per cent.

Gabriel Farrell, Director of the Perkins Institution for the Blind, discussing the Right of Sight in July Hygeia says:

"To bring about the possible eradi-

cation of congenital syphilis and the conservation of sight destroyed by it involves the full cooperation of doctors, the support of the press and the radio, and the active approval of an enlightened public. Medical authorities know that treatment of an infected pregnant woman started at about the fourth month will protect the child from the curse of congenital syphilis. If medical schools will make this routine the established practice in teaching, if all doctors will as a part of prenatal examination give blood tests followed by treatment where results indicate its need, and if prospective parents can be taught to demand this care, thousands of children can be saved from the ravages of this gruesome disease."

There are ten ways, summarized by Mr. Farrell, for safeguarding the right of sight to everyone. These are:

1. Drops of silver nitrate solution administered at birth of every child.
2. The eyes of all children regularly and periodically examined and tested.
3. Corrective glasses scientifically prescribed and treatments given as needed.
4. Sightsaving classes organized for school children having defective vision.
5. Children's sight safeguarded from accidents, especially from fireworks, air rifles, scissors, etc.
6. Campaigns for safety in industry, and explicit observance of rules by all workers.
7. Avoidance of marriage or at least of parenthood by persons with transmissible causes of blindness.
8. A blood test before marriage.
9. Blood tests as a routine part of prenatal care with treatment when necessary.
10. The support of every movement aiming to conserve sight as an inalienable right.

Further Newspaper Cooperation

By ROY NORTON, M.D.

The special Health Edition of the *Jackson News* of Northampton County for July 2 arrived too late for comment in the August issue of the Health Bulletin, since we prepare copy for the Bulletin a month in advance. This is a well prepared publication similar to that in which Parker Brothers, the editors, collaborated with Dr. Faison and his staff for a *Hertford County Herald* health edition of June 17.

Dr. Parker is beginning his public health career after excellent preparation and we feel sure that he and his staff will deserve and receive full cooperation from the community which they serve. The people of Northampton have a right to continue to be informed regarding the work. There are still many misconceptions regarding health and disease and there are many ways in which the local newspaper can cooperate in the work of public health instruction.

Some of the editorial comment is interesting. After stating the excellent qualifications, there is the statement, "we cannot understand why a man so young as he should give up an established practice to enter public health work at a nominal salary." We also sometimes wonder with the editors why well trained and able young men consecrate their services to the ministry, teaching, or medical missionary work at "nominal salaries." Fortunately for all of us and giving denial to those who predict early doom to our civilization, there are still many talented young men and women who feel that it is not all of life to make money for them-

selves. There is much satisfaction and real happiness in protecting and promoting the public health in a community so that more and more wives face childbirth without fear, more homes see the summer and fall pass without typhoid in the family; more children go to school without preventable and correctible handicaps; fewer babies strangle to death from diphtheria; smallpox becomes almost a medical curiosity; more homes are protected from exposure to the dangers of human wastes and from pestiferous and disease carrying insects; more babies drink safe milk and pure water and have an adequate diet; fewer infants and young adults have life's roseate promises shattered by the Great White Plague; fewer young men and women have their love dreams unrealized because of the ravages of syphilis and gonorrhea; and thinner becomes the veil of ignorance, misconception and traditional prejudice blocking public health progress.

We are now spending about thirty dollars for curative medical practice to each dollar devoted to prevention. Is this logical when there are so many diseases and disabilities that we know how to prevent? We have the knowledge. We merely need to apply that scientific information. There is now less lag between acquisition and application of medical knowledge than ever before but the time can be still further shortened by making use of all available means of public health instruction. Future generations will probably consider us extravagant to have spent so much on attempts at cures while making so little use of our knowledge of the more economical prevention.



Third Grade Chapel Hill Public School. All of them in perfect physical condition at close of school in June.

The Health Bulletin

Published by THE NORTH CAROLINA STATE BOARD OF HEALTH

This Bulletin will be sent free to any citizen of the State upon request!

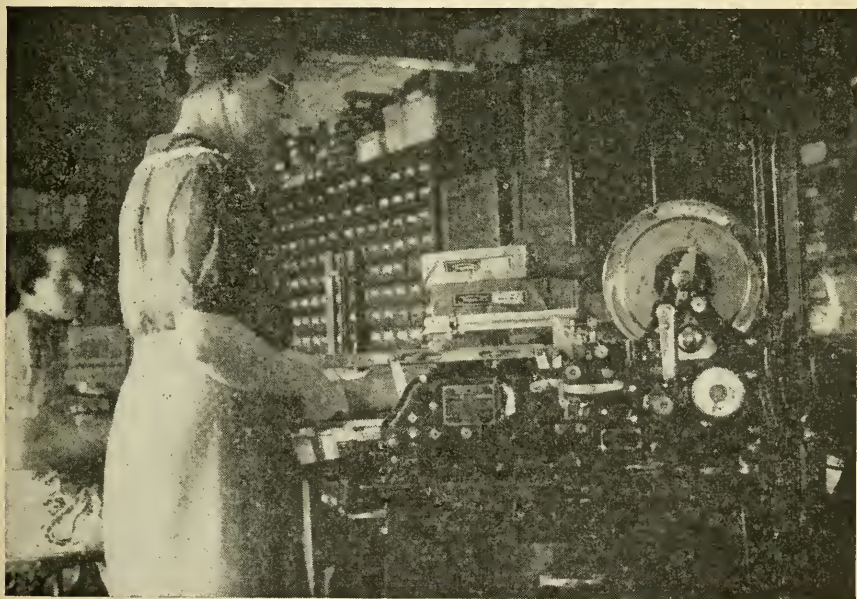
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Mailing Out the Health Bulletin



The above is a section of the mailing room of the State Board of Health. From this room each month 43,000 copies of the HEALTH BULLETIN are mailed out to citizens living in every county in North Carolina and to health workers in all other states, and in many foreign countries.

The picture shows Miss Lucy Hulin at the machine in the foreground. Miss Hulin has done this job every month for twenty-one years. For nearly fourteen years of this time she has been assisted by Miss Maggie Blackburn. Others engaged with Miss Hulin in the varied and strenuous work of the mailing room are Miss Mary Cheatham, Mrs. C. O. Abernethy, and Miss Mozelle Goodwin, whose picture appears in the background.

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FREE HEALTH LITERATURE

The State Board of Health publishes monthly THE HEALTH BULLETIN, which will be sent free to any citizen requesting it. The Board also has available for distribution without charge special literature on the following subjects. Ask for any in which you may be interested.

Adenoids and Tonsils	German Measles	Scarlet Fever
Cancer	Health Education	Smallpox
Constipation	Hookworm Disease	Teeth
Chickenpox	Infantile Paralysis	Tuberculosis
Diabetes	Influenza	Tuberculosis Placards
Diphtheria	Malaria	Typhoid Fever
Don't Spit Placards	Measles	Typhoid Placards
Eyes	Pellagra	Venereal Diseases
Flies	Residential Sewage	Vitamins
Fly Placards	Disposal Plants	Water Supplies
	Sanitary Privies	Whooping Cough

SPECIAL LITERATURE ON MATERNITY AND INFANCY

The following special literature on the subjects listed below will be sent free to any citizen of the State on request to the State Board of Health, Raleigh, N. C.

Prenatal Care	Baby's Daily Time Cards: Under 5 months;
Prenatal Letters (series of nine monthly letters)	5 to 6 months; 7, 8, and 9 months; 10
The Expectant Mother	11, and 12 months; 1 year to 19 months;
Breast Feeding	19 months to 2 years.
Infant Care, The Prevention of	Diet List: 9 to 12 months; 12 to 15
Infantile Diarrhea	months; 15 to 24 months; 2 to 3
Table of Heights and Weights	years; 3 to 6 years.
	Instructions for North Carolina Midwives

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Notes and Comment

By THE EDITOR

AS we were almost ready to go to press for this issue, we received in a single morning's mail several communications — extracts from which will form the basis of this editorial comment. All of it pertains to the rather old and sordid story of fakes and fakers. At this particular time the tobacco markets are open and the country people come to town and have a little money to spend. Hence, the usual harvest is being reaped by the patent medicine quacks and others of that tribe.

FIRST, a physician friend in Rockingham, down in Richmond County, sends us a poster promiscuously scattered all over that town and found in the hands of many people along with bottles of the stuff. In that case, it is "Root and Herb Tonic." Suffice it to say that this is labeled as follows, spelling as on the poster: "A for Pellegra; B for Rheumatism; C for High Blood; D for Lo Blood; E for Eczema; F for General Body Builder; FF for Fever." Of course, it is all alike, is utterly worthless and sells for \$1.50 a bottle. It is discouraging to know that there is any human being foolish enough to attribute any curative properties to any such stuff.

SECOND, the following letter from a physician friend in Smithfield explains itself. We are taking the liberty of quoting this letter in full:

"With the opening of the tobacco markets in Eastern North Carolina and the influx of medicine venders goes a story of misrepresentation and thievery that seems to me has never been challenged, and allowed to run rampant to the detriment of thousands of people—particularly the farmers.

"Living for three months of each year amongst this sort of thing has given me an opportunity to see the ugly workings of these liars. The money these persons take from Johnston County alone each fall would astound any sane thinking person, to say nothing of the actual indirect harm done by them.

"Many of them represent themselves as doctors who for one reason or another have to live an outdoor life, or who were hired by the medicine company to advertise their product, or who after graduation found the practice of medicine to be humbugger, and thereafter found a sure cure for almost all human ailments which he is now selling. One minute's listening to his political-like speech would convince any doctor that he didn't know the first rudiments of medicine. However, these fellows are convincing speakers and they swear by all that is good and Holy that their medicine will cure this and that disease. I have heard one say that "One drop of this medicine put on the palm of a baby's hand

will cure any case of diphtheria that ever existed." And I have seen cases of diphtheria die because a doctor was not called in time while the father was putting faith in patent medicine that the vendor said would cure diphtheria. This is just one instance out of thousands such remarks. However, they guarantee such cures.

"Isn't there anything to stop this racket? Isn't it in the province of the State Board of Health to collect such evidence as will convict these quacks and to prosecute them? I can see no greater need right now than to quash this rotten business before thousands of dollars are stolen from Eastern North Carolina by this horde of thieves, who seem to be chiefly from the North and West.

"One is operating right near my office by day (Smithfield has a tobacco market) and at Selma where there is no market, by night. I hope you can find time to come see and hear for yourself what is going on. If there is no state law to curb this business, I feel sure there must be a Federal, and I would like for some one to call their attention to it.

"The doctors in these towns are helpless to do a thing. The cry would instantly go up that they are jealous, if they should turn a hand. Well, I'm not jealous, but if I ever find the culprit who sold glasses in Wilson last year and represented himself to be my partner in Smithfield, and that if the glasses did not fit PERFECTLY to go to see Dr.———, I'm going to try to wring his neck. I think every sucker came to me complaining—and expected me to fit another pair FREE.

"This affair has grown to such proportions that someone should take a hand in its eradication."

The above letter is interesting in several ways. In the first place, it is a description of a new racket, that is, a faker representing himself to be associated with a reputable

practicing physician. Of course, he has long ago gone on to Western North Carolina or to some other state and he will probably never be apprehended. If anyone should be able to locate this faker, he should be held and the sheriff notified at once.

The physician reporting this activity in Smithfield and Selma very properly states that if physicians prosecuted these fakers, that people will react in behalf of the fakers on the ground that the doctor is acting from jealous motives. This is far from the truth, as any sensible person would realize if he stopped to think about it. The facts are that there are too many loopholes in the law. This fellow can get up and make his statement that "a drop put on a baby's hand will cure diphtheria" and get away with it, provided it is not printed on the label of the bottle, and provided further that he does not do an examination of an individual and directly prescribe in the manner of a practicing physician, and also further and most important, provided he has paid the tax levied by the town and the county and the State, if any, to ply his nefarious trade.

THIRD, a physician friend from Shelby reports that some of his patients have been approached by a faker of this type, exploiting the present agitation on the menace of venereal diseases. In this instance, the patient has been offered a half gallon jug of a special so-called tonic with the information that the doctor who reports it to us uses this stuff in his practice as a remedy.

With the return of prosperous times in this state, we are literally overrun with fakers interested only in getting the money from the man who has worked and earned it. The old dictum that the buyer should beware does not seem to enable the sucker to resist the hypnotism of these fakers.

Is Health Instruction Needed?

By ROY NORTON, M. D., Assistant Director
Division of Preventive Medicine

IN speaking before the Jefferson Medical College Alumni meeting at Philadelphia in June, Dr. J. K. Hall said: "Jefferson conceived personal liberty to be impossible in the individual enslaved by ignorance; he knew that democracy could not prevail amongst people who are ignorant, and that there could be neither civic nor political progress amongst people whose minds were undisciplined by knowledge."

Some citizens, even including some physicians, have indicated they felt a curative medical program to be all that is needed in their county. They feel that general health instruction and a preventive health program, which requires public understanding and cooperation for success, are unnecessary frills. In other counties the medical society and leading clubs of influential women and men have urged the development of a public health program of prevention and health education in the community.

We have seen poor individuals pay an extravagantly high price for a widely advertised preparation. They could have obtained similar results from a drug costing a tenth or a fifteenth of the price paid. That is an example of enslavement or impairment of personal liberty by ignorance, since it would have probably been better not to use any drug at all.

High pressure advertising through radio and the newspapers of laxatives, headache remedies and antacid drugs can be counterbalanced with benefit to the public by general and public health instruction. Some examples may be illustrative.

A child develops a pain in the

abdomen. It is early in an appendicitis attack. The pain is in the upper mid-abdomen and usually does not shift to the lower right side for several hours. He is nauseated and his bowels have not moved for over twenty-four hours. The mother, grandmother or aunt gives either castor oil, Epsom salts, or some "patent" cathartic. In trying to protect against the increased pressure on an inflamed appendix, already tense, nature may cause the drug to be vomited. Does Mother take Nature's hint? She gives a second and perhaps a third laxative until the stomach gets tired and lets it go through. The appendix ruptures. There is temporary relief, like that following the relief of opening a boil. But the pus spreading among the loops of the intestines sets up a general and fatal peritonitis. Too late now, the doctor is called. Such a neglected and mistreated child usually dies with or without an operation. The newspaper account too often states erroneously, "died of an appendicitis operation." A recent study showed that one fifth of a certain group of appendicitis-peritonitis deaths had been due to fatal cathartics given on the advice of doctors. It was found that in most cases the doctor was not called early enough; in one fifth of the cases the wrong doctor was called. The heartbroken mother cries, "It was the Lord's will; He took him." Yet it is hard to believe that our all-wise and all-merciful Father carries out His plan through neglect, stupidity and ignorance in the handling of little children. The laxative would not have been given if the consequences were understood. Would a wider dissemination of de-

pendable health information be helpful here?

A child develops a sore throat. Not much fever or prostration at first. The mother decides it is "just a little cold settled in the throat" and rubs some widely advertised salve on the neck and chest and usually gives a laxative. The child slowly becomes worse and breathing becomes more difficult. About the second or third day the doctor is called in and he finds the trouble to be diphtheria. Antitoxin is immediately given in enormous doses but the powerful toxin has already spread through the system and the heart muscle and other structures are permanently damaged and more often than not such a child dies. Again we hear, "It was the Lord's will," forgetting the fatal source of false security into which the mother was lulled as she applied the highly advertised salve or ointment or gave an antiseptic gargle. The radio announcer's voice had been so convincing as he spoke of the virtues of the ointment and gargle to the accompaniment of soft music. Surely he could not have been influenced by selfishness or commercialism! The patent remedy vendors wax rich. The bereaved mother bows her head and sobs, "The Lord's will be done." If she could only see the connecting links in the chain that snatched her baby away! Has the public health department a duty and opportunity in this respect?

A young housewife in good health and desiring to be in the best possible physical condition for the sake of her children reads the newspaper and magazine advertisements and listens to the radio discussions of "Nature's Way" laxatives, and of antacids that correct "dangerous acids." She tries them. Her digestive and eliminative systems become upset. She does not know that the

stomach glands, with each meal, secrete hydrochloric acid to take part in normal digestive activity and that the antacid has upset the work. She suspects various foods and may eliminate certain ones to the point of producing an anemia or nutritional deficiency disease, such as pellagra. She may listen to foolish diet fad-dists. The constipation induced by promiscuous use of laxatives turns her to the pernicious enema habit. With the constipation she develops a headache and turns to aspirin, or some other drug of greater potential danger. She has heard and read that these drugs are harmless and merely cooperate with nature in relieving "inorganic aches and pains." She gradually increases the size and frequency of the doses forgetting Mr. Dooley's common-sense definition that, "drugs are a little iv a Pizen that a little more would kill ye." The conscientious young wife has known of the dangers of intemperate use of alcohol and tobacco and she scrupulously avoids them. Yet her digestive, eliminative and nervous systems have been completely undermined and her health shattered through an unsuspected havoc-wrecking type of commercial publicity. Would dependable health instruction and a curb on the advertising methods of dollar-seeking drug vendors have been useful in this case? Are civic and political progress and personal liberty threatened as the health of literally thousands of our North Carolina women, men and children hang in the balance today? Even some of the previous good instruction work is being broken down, especially with younger people, by the drug advertising above referred to along with the present liquor and cigarette advertising.

Many of our citizens infected with tuberculosis, syphilis, malaria,

gonorrhea, cancer and other diseases are not under regular medical supervision and receive inadequate medical care. Some are highly infectious to others and do not even know they are diseased. Adults whose sputum is loaded with tubercle bacilli are daily exposing little children whose resistance is poor. Diseased maids and public food handlers are a constant hazard in proportion to the community ignorance and lack of proper precautions. Adequate preventive care including health instruction is lacking in the majority of our homes. More families than most people suspect lack even proper curative care.

With better health instruction, our people will be better able to discriminate and select the best way to invest their health budget. Fewer will spend two dollars for a useless and harmful drug while neglecting to take advantage of free rest, sunshine, fresh air and pure water. Fortunately, many of the best things of life are inexpensive. A smaller number of our citizens will waste money on quacks, irregular "doctors," cultists and patent medicines and choose instead the services of a competent physician.

Perhaps it is well to inquire into the reasons why the need for dependable health instruction has become increasingly urgent during the last few years. Our laws regulating the advertising and sale of such potentially dangerous drugs as laxatives, antacids and pain-releiving remedies are inadequate and many new unscrupulously selfish drug makers have sprung up recently. With the repeal of national prohibition, the advertising of alcoholic beverages has become disgusting even to those who had hopes that the change would be a step toward temperance.

Dependable health instruction is

not easily defined because it may originate from so many sources and be spread through so many channels. Its purpose is to inform and enlighten the general public in the ways of protecting and promoting individual, family and community health. It comes chiefly from the medical profession who have learned that more progress can be made with a properly informed and cooperating public than could be made with a people being blindly led as in the days of the Latin prescription and the "look wise and tell 'em nothing" manner. It aims to banish prevalent superstitions, misconceptions, taboos, prejudices and misunderstandings regarding the heredity, environment and functioning of the human organism individually and in groups, in health and in disease. The possibilities and methods of causing temporary or permanent injury to organs or the individual or the community and the available means of preventing or correcting such injury come within the scope of health education. To be of greatest permanent value, public health education must be utterly unselfish: it must serve to advance the welfare of the general public and not selfishly serve any class or group, such as drug manufacturers, druggists, doctors, lawyers, newspaper or magazine publishers or radio broadcasting companies. The teaching must be accurate, attractive and easily understood. The individual receiving the information should be stimulated to be humble because he knows so little rather than to be arrogant and self-sufficient because he knows so much.

As a beginning toward laying the foundation for proper public health instruction, the publicity tending to undermine health should be given less emphasis. A few newspapers and magazines have voluntarily re-

fused liquor, cigarette and patent medicine advertising. It is hoped that those making and selling things tending to promote the public health will favor these brave pioneers. Selfish commercial interests have already grown rich and powerful, however, and will say that to curb them is to crush human liberty and happiness. Druggists and other merchants make a big profit on patent medicines and cigarettes and even the local and state governments are sharing the profits from liquor sales. Doctors, who should lead the crusade against the things harmful to health and for the things that promote health, have been reticent because it might seem like self-advertising. Perhaps some of them have been deterred because they accept favors of druggists and drug manufacturers or share in the sales profits. Some have felt that the health information given out by organized medical groups and health departments has been primarily to promote the welfare of doctors rather than the general public. A few backward doctors have opposed the distribution of health department literature because it would enable the public to discriminate better in the matter of adequate and competent medical care. Many of our colleges, which should have a great educational influence in health matters, are indirectly muzzled by the sources of the donations which they have accepted. Going still further toward the basic factors obstructing health education and legislation for the welfare of the general public, we find an insidiously arranged governmental system in which almost all the important offices in the executive, judicial and legislative departments, state and national, are held by men from one group comprising an infinitesimal part of our population—namely, lawyers.

The legal profession is composed largely of a very high type of men or the situation would be even more precarious than it is. To have such concentrated power in the hands of just farmers, miners, doctors, teachers, or merchants would probably be worse, but to give the general population a more equitable representation would almost certainly serve to promote the general welfare and avoid some discriminatory handling of executive, judicial and legislative affairs. An entrenched oligarchy tends to cater to wealth and position and becomes oblivious to the cries of the men, women and children of this and other states, who are being cheated, at the same time, out of their money and their health. There is a crying necessity for legislative and other restrictive measures against rampant anti-health activities.

BABY DEATH RATE ROSE DURING SUMMER

From a health standpoint the past summer was fairly good to all North Carolinians except the babies. During the month of July, (the August rates are not yet available) the infant death rate rose to the high peak of 82.9 for 1,000 live births, with 520 deaths of babies under one year of age recorded for July alone. In June there were 491 deaths with a rate of 68.2.

Just what caused the sudden rise in the infant mortality rate in July, is not easy to determine. But it is known that diarrhea and enteritis caused a large number of deaths of children under two years of age—377 deaths for June and July, and that whooping cough also took an unusually high toll in 47 deaths during these two months. The indications are that the babies did not receive all the care they were entitled to this summer.

Economy Versus the Safety of School Children

By MRS. J. HENRY HIGHSMITH

THE great school disaster in New London, Texas, last March, startled the world. Schools, homes, communities and every agency responsible for the safety of children was shocked into the realization that deadly hazards may be lurking even in some of today's most modern and well equipped buildings. School officials all over the country resolved then to be more alert and to employ every precautionary measure in behalf of the safety of the children under their care. Six months have elapsed since the New London catastrophe, just about enough time for the country as a whole to forget the Texas tragedy, also their resolves to be more vigilant concerning the safety of school children. But should they be allowed to forget?

So complete was the destruction of the school building in Texas that it may never be definitely known what caused the disaster. But it is known that false economy and technical carelessness or ignorance were criminally involved. It was brought out in the testimonies given at the investigation that a cheaper heating system was installed in place of that originally specified, and that a more dangerous high "wet" natural gas was substituted for a safer low pressure "dry" gas, because it was cheaper. Furthermore, no impartial engineer was called on to inspect the finished installation and report on its safety. Even the salesman who persuaded the school to buy his heating system was shocked at the recklessness with which they substituted the cheaper for the more expensive, but safer system, and insisted on the

use of pressure reducing regulators which were adopted eventually, but which were insufficient for safety.

It is evident that the lessons for schools to learn from New London are many: That economy in planning and maintaining a school building has its danger points. That too often the practice of economy becomes an extravagant waste. That only expert and impartial service should be employed in planning and constructing a building, and in the installation of all scientific equipment. That frequent and careful inspection by technicians should be made regularly of the entire building and grounds. That janitorial service is not to be depended on for safety, neither is a salesman's talk.

Probably the most needed lesson for North Carolina to learn from the above tragedy is one also having to do with false economy. The danger involved may be nothing so sudden and spectacular as an explosion, but it is just as real. It is the diseases and unhealthful conditions that school children are subjected to through inadequate or no school sanitation, particularly the disposal of school sewage. A few years ago North Carolina had the disgraceful record of having no sewage facilities whatsoever for 1,009 schools, or an enrollment of 47,041 pupils. But a recent survey made of 93 counties shows that only about 114 schools with an enrollment of 4,091 pupils are without sewage disposal in any form.

This is a great improvement, but according to the survey, there are still 2,584 public schools in the state serving approximately a quarter of

a million of school children which have no other means of sewage disposal than privies. This means they are without the sanitary facilities that running water would provide and in some cases it means that the water supply is still a questionable pump, well or spring.

But what is probably a worse crime against sanitation, health and decency, and one most generally complained of to the State Board of Health, is an inadequate water supply in some of the larger schools, many of them having new and apparently finely constructed buildings, and purporting to have modern and efficient systems of plumbing. What they actually have is not enough water for effective drinking fountain purposes, for washing hands and for flushing toilets. The complaint has been made that the water is cut off between recesses or for several hours during the day. In consequence, children have to go with unwashed hands, and the unflushed toilets become unbearably indecent and insanitary. Improperly installed and cheap plumbing is often given as the excuse for such intolerable conditions.

Hence, economy at any cost, or carelessness and indifference are the prices being paid for filth, infection and disease. There have been no fewer than three outbreaks of venereal diseases among school children

of the State due to insanitary toilets, and who knows how many intestinal disturbances, skin infections and communicable diseases have been contracted in such unsafe surroundings as theirs at school?

Another complaint that may be laid to false economy, short sightedness or to both is the hazards involved in the lack of transportation facilities for some schools. In order to transport the pupils with an insufficient number of busses, it becomes necessary to make two trips each morning and afternoon. Those living furthest from school are required to be ready for the first trip not later than seven o'clock, necessitating their getting up at six. They return around five or six o'clock in the afternoon, having spent ten or twelve hours in getting to and from, and at school. The complaint against the excessively long school day is that it often means the pupils go without breakfast and sufficient rest, they are exposed to cold, and in making haste for the second trip, there is an increased element of danger.

Obviously, for the sake of economy, school children are made to suffer unnecessary hardships, and run risks dangerous to their health and their lives, and the school is made more ineffective in its service to the community. Economy may sometimes mean a saving, but often as here, it means inefficiency and waste.

Does Your County Have a Health Department?

By ROY NORTON, M. D.

IF your county has a health department, find out the services that are available and give your full cooperation. If the citizens of your county are without these services, find out the reason why. Counties

having a taxable wealth of about ten million dollars and 25,000 population can have a separate county department without too much overhead. Those counties smaller in population and wealth can cooperate with a

neighboring county and obtain public health service through a district health department. State and federal funds are available for use in either county or district departments. Are your citizens being deprived of the use of these funds by the refusal of your commissioners to contribute to such a joint budget? Remember that your County Commissioners will provide the services that they feel are really needed and strongly desired by the community. Are selfish interests

blocking the service? Your medical society, your Women's Clubs, your civic clubs and your P.-T. A. organization can help greatly if they are interested. Are they doing it? It is a part of good citizenship to work toward securing a trained organization for the protection and promotion of public health in your community; it will then be your duty to give your cooperation toward the efficient and economical maintenance of this service.

Beware of the Puppy or Kitten That "Looks Lost"

By ROY NORTON, M. D.

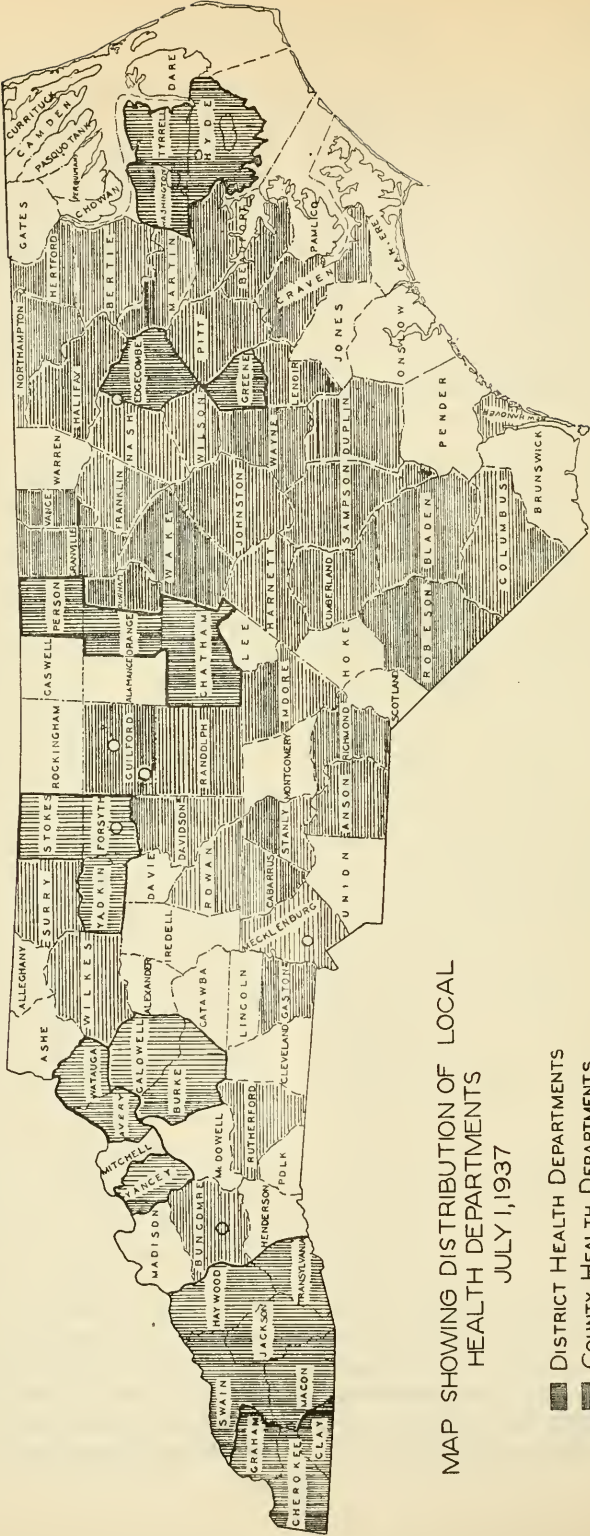
THE same thing occurs so often that it is well to repeat the above warning. The following is a sample article taken from yesterday's paper:

"Twenty or more residents of this town (Vineland, N. J.), are taking the Pasteur anti-rabies injections today after it was learned that a puppy which had bitten them had suffered from rabies. The dog was a small, likeable looking mongrel, part fox terrier. On Thursday it wandered into the yard of George Davis, an employee of the municipal electric light plant. Thinking it would be a welcome playmate for his children, Davis took it in. By the following day it had bitten both children and also a neighbor. Davis took the little dog to the plant with him intending to have it destroyed. Others at the plant, however took a fancy to the dog and persuaded Davis to let it loose. It was then that about twenty of them were bitten, mostly on the hands. An examination of the puppy's head showed the presence of rabies. Mayor Gittone ordered local police to obtain the anti-rabies serum and awaken everyone who was known to have been exposed. The physicians had the serum by 4 A. M.,

and they started administering it immediately."

With the reopening of schools it is timely for health officers, nurses, teachers and parents to pass the warning along that among the early symptoms of rabies in a dog or a cat is a tendency to leave home and wander around looking bedraggled, homeless and in need of sympathy and care. Such dogs or cats often go to school grounds and may cause several children to have to take the painful anti-rabic injections. People seem to forget that most dogs and cats will stand a lot of underfeeding, neglect and even mistreatment before leaving home. It is possible, therefore, that any puppy or kitten or grown cat or dog found wandering around is not normal and is very likely diseased. Instead of exhibiting a foolish sentimentalism, offering to handle them or making them playmates for our children, our common-sense should make us suspicious and cautious. Rabies may be present in a puppy or kitten only six weeks or two months old. A little forethought in this regard may save a great deal of torturing worry, pain and possibly horrible suffering and death.

HEALTH SERVICE AVAILABLE



MAP SHOWING DISTRIBUTION OF LOCAL
HEALTH DEPARTMENTS
JULY 1, 1937

- ☒ DISTRICT HEALTH DEPARTMENTS
☒ COUNTY HEALTH DEPARTMENTS
☐ CITY HEALTH DEPARTMENTS
☐ NO ORGANIZED HEALTH DEPT.

Health Service Available

(See Map on Page 12)

FULL-TIME health service, with the consequent protection it insures, is now available to 2,469,210 residents of North Carolina counties, it is announced by Dr. Carl V. Reynolds, State Health Officer. Since January 1, he said fourteen counties have been added to the list, giving the above totals on July 1. This means that 78 per cent of the State's population now enjoy the benefits of full-time organized health service, while 22 per cent, or 701,066 citizens are without its protection.

Counties that have taken advantage of full health benefits since January 1 include: Anson, Burke, Caldwell, Cherokee, Clay, Dare—provision made since map issued—Greene, Transylvania, Hyde, Tyrrell, Washington, Johnston, Martin, Chat-ham and Stanly. Added to these to make the group of 66 complete are: Avery, Watauga, Yancey, Beaufort, Bertie, Bladen, Buncombe, Cabarrus,

Columbus, Craven, Cumberland, Davidson, Duplin, Durham, Edgecombe, Forsyth, Stokes, Yadkin, Franklin, Gaston, Graham, Granville, Guilford, Halifax, Harnett, Haywood, Jackson, Swain, Macon, Hertford, Lenoir, Mecklenburg, Moore, Nash, New Hanover, Northampton, Orange, Pitt, Person, Randolph, Richmond, Roberson, Rowan, Rutherford, Sampson, Surry, Vance, Wake, Wayne, Wilkes and Wilson.

In addition to these, there are six North Carolina cities with full-time organized health service, each located in a fully organized county. The cities are: Asheville, Charlotte, Greensboro, High Point, Rocky Mount and Winston-Salem.

The full-time county health programs are under the advisory supervision of the Division of County Health Work, State Board of Health, of which Dr. R. E. Fox is the director, and this division maintains close contact with local units at all times.

Dry Ice

By R. N.

EVERY school child should have attention called to the fact that dry ice is not so simple as frozen water which it is widely replacing as a refrigerant for frozen dainties. Children have found a fascination in the fact that by holding a small particle of this intensely cold carbon dioxide snow in the mouth they can "blow off steam."

A recent issue of International Medical Digest calls attention to this new hazard. The intense cold will destroy tissue and has been used medically to remove facial blemishes. The habit of holding a small piece in the mouth will cause ulceration. A case is cited in which a small boy was holding a grape-size piece in his

mouth and accidentally swallowed it. The piece lodged in his throat, however, and caused such intense and rapid swelling that he was saved from choking to death only by immediate operation. He then had to go through a two weeks recovery period during which there was much pain and suffering.

What seems harmless play or innocent pastime, therefore, may end tragically. Just as the burned child fears the fire, the frozen-throated or mouth-ulcerated child avoids foolish handling of dry ice. A little forethought and health instruction, however, will help to prevent injuries from both the intense heat and extreme cold.

Expectant Mothers Need Medical Care

By ROY NORTON, M. D.

IN a recent issue¹ of the Journal of the American Medical Association is an interesting article on antepartum care. A study was made of 1009 patients through the period of pregnancy and confinement and the following defects were detected: toxemia of pregnancy 52, contracted pelvis 52, breech cases not spontaneously corrected 51, cardiac disease 22, syphilis 14, diabetes mellitus 2, and other miscellaneous defects 37.

Regarding these findings the following excerpts from their observations are well worth repeating here:

"No one can question the value of the early recognition of toxemia and immediate hospitalization so that proper measures for combatting the toxemia may be instituted.

"The outlook for mother and baby in the presence of a small pelvis depends on good obstetric judgment and technic—The ultimate maternal and fetal mortality is determined by the conditions existing at labor.

"The malpresentation (breech)² could be corrected in many instances provided it was detected before the presenting part became engaged or the fetus grew too large to make the turn. Statistics indicate that the vertex (head) mechanism of delivery is fraught with far less danger to the infant than the breech mechanism.

"In a large series of cases the mortality of cardiac patients having antepartum care was 2.2 per cent, whereas in those who did not have such care the mortality rose to 20 per cent.

"Antepartum treatment of syphili-

tic mothers undoubtedly reduces the percentage of fetal deaths, premature labors and syphilitic infants in a striking manner. The good results are roughly proportional to the amount of treatment given and the time at which it is started; even a few treatments in the last weeks of pregnancy will materially alter the outcome.

"Fifty per cent of pregnancies in diabetic women end in abortion, miscarriage or premature labor. In 36 cases (patients) in which there were 121 pregnancies he reports only 74 live births. When the gestation has gone to term, the babies are larger than usual.—This—disproportion—adds to the hazards of labor. Before (or without) the use of insulin the maternal and fetal mortalities were quite high. With insulin therapy the maternal death rate has been appreciably reduced, but fetal mortality continues at a high level.

"The main beneficiary of good antepartum care is the offspring. That explains in a large way why the trend of fetal mortality has been steadily downward since 1915, whereas the maternal mortality in the United States registration has remained stationary.

"In theory, at least six of the fifteen deaths due to toxemia of pregnancy and two of the three deaths from cardiac disease might not have occurred if more adequate antepartum care had been given."

These facts very strikingly emphasize the fact that expectant parents should avail themselves of the services of a competent physician

¹ Antepartum Care. By A. B. Tamis and Jacob Clahr. JAMA, June 17, 1937.

² Parenthetical insertions in this article are by the present author.

early in pregnancy so that every mother shall have a careful and thorough examination and regular follow-up advice and care during this critical period. Certain defects and diseases may not even be suspected by the patient but would most likely be found at the time of the medical examination and corrective or preventive measures could then be instituted early. Most doctors make no additional charge for this valuable prenatal supervision and some even refuse delivery service to those who have not previously been given antepartum care. Mothers are becoming better informed regarding what they should expect in prenatal care. This is well because of the few doctors who examine the patient, give advice and careful supervision during the antepartum period only insofar as they feel that the patient demands these services. A mistake in judgment, or for other causes failing to provide early and thorough prenatal care, has lost patients for some doctors. It is only natural that expect-

tant mothers should go to doctors who demonstrate their competence and individual personal interest rather than staying with one who is willing to depend on guesswork. A few anxious expectant mothers have gone to their physicians early in pregnancy to secure the examination and prenatal care only to receive a pat on the shoulder and be told to go ahead and forget about the pregnancy and "call on me when you get in labor." Fewer doctors are showing such lack of interest and fewer mothers are satisfied with such inadequate supervision. Expectant fathers are coming to realize more fully their responsibilities in this important matter.

A study in Denver, Colorado, showed that with proper prenatal care the infant mortality was reduced from 178 per 1000 live births to 15 per 1000. In our own state the possibilities of saving the lives of mothers and babies by adequate prenatal and obstetric care has been demonstrated in Charlotte and a few other localities.

Cancer Control

MAJOR A. L. Bulwinkle, congressman from this district, deserves much credit for sponsoring a bill through Congress providing for the establishment of a national institute for the study and treatment of cancer.

Under the terms of the Bulwinkle bill \$750,000 is appropriated for the equipment of a cancer clinic to be set up by the United States Health Service at Washington. A National Advisory Cancer Council is also to be created, made up of eminent doctors and scientists who will supervise the program to be attempted under the general direction of the U. S. Surgeon General.

This is a great sum of money, to be sure, but only a bagatelle compared with the sixty millions or more which the government is spending for a battleship which will be named North Carolina. Spending money judiciously for public health is much more to be desired than for many of the other things on which millions are being squandered.

Cancer is taking a death toll second only to ailments of the heart, and since the appropriation is designed to save lives and make for happiness and health among human beings, it is no wonder that Congress should act with such unanimity on the cancer control bill.—*Shelby Star*.

Wherein Iredell Lags

ACCORDING to Dr. Carl V. Reynolds, state health officer, seventy-eight per cent of the State's population now enjoys the benefit of full-time, organized health service, while twenty-two per cent is without this protection. And measured by counties, seventy-nine have provided this full-time health service while twenty-one have not.

There are abundant reasons to regret that Iredell has chosen to tag along with the minority. Certainly the need for a continuous and well-planned campaign against disease is as great or greater in Iredell than in little Clay or Avery in the west or Tyrrell or Hyde in the east, yet these counties have what we have not.

Having dwelt for a spell in a county that has provided a full-time health service, and having watched that activity with critical interest, we are prepared to say that it is worth many times more than it costs. Wilkes county, at first reluctant to take this step, wouldn't back-track for several times the cost. And incidentally it was a Statesville nurse who, throwing her heart and soul into the work, demonstrated the worthwhileness and assured the permanency of this effort in that county.

There are health details, having to do particularly with preventive factors, that the present set-up in Iredell county does not and cannot provide. These details involve an organized program to reduce maternal and infant deaths; the correction of environmental sanitation; prevention of the spread of communicable diseases; contact with homes of children who are absent from school because of communicable diseases; consulting with expectant mothers as to prenatal care, and other equally important activities that definitely affect the public health.

And then the State has decreed mandatory examination of domestic servants, looking to the control of tuberculosis and venereal diseases. Obviously this involves a mass of detail effort that is all but impossible on a part-time basis, if the full objective is to be realized.

The State Board of Health has at its disposal funds for helping all the counties of the State to establish these full-time local health services, provided the counties make reasonable appropriation of local funds to match State and Federal funds.

We yield to none in decrying the tendency to spend, yet we earnestly believe that Iredell county could count it an investment and expect to reap dividends in joining these seventy-nine North Carolina counties in providing full-time health service.—*Statesville Landmark.*

WHAT ABOUT THE TEACHER'S HEALTH?

By MRS. J. HENRY HIGHSMITH

MUCH is being said and done these days in the interest of the mental and physical health of school children, but less is being said and done about the health and physical fitness of the teacher. And yet there is a close and definite relation between the two. The state of the teacher's health, and of her mental and emotional well-being, largely determine those states in her pupils. The teacher's health, personality, general attitude and outlook on life, are readily reflected in the attitude and conduct of her pupils. Their behavior patterns are largely of her making.

Teachers owe it to themselves, their profession and to the children put in their charge for eight or nine months of the year to keep themselves as mentally alert and physically well as possible.



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FREE HEALTH LITERATURE

The State Board of Health publishes monthly THE HEALTH BULLETIN, which will be sent free to any citizen requesting it. The Board also has available for distribution without charge special literature on the following subjects. Ask for any in which you may be interested.

Adenoids and Tonsils	German Measles	Scarlet Fever
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Chickenpox	Infantile Paralysis	Tuberculosis
Diabetes	Influenza	Tuberculosis Placards
Diphtheria	Malaria	Typhoid Fever
Don't Spit Placards	Measles	Typhoid Placards
Eyes	Pellagra	Venereal Diseases
Flies	Residential Sewage	Vitamins
Fly Placards	Disposal Plants	Water Supplies
	Sanitary Privies	Whooping Cough

SPECIAL LITERATURE ON MATERNITY AND INFANCY

The following special literature on the subjects listed below will be sent free to any citizen of the State on request to the State Board of Health, Raleigh, N. C.

Prenatal Care	Baby's Daily Time Cards: Under 5 months;
Prenatal Letters (series of nine monthly letters)	5 to 6 months; 7, 8, and 9 months; 10
The Expectant Mother	11, and 12 months; 1 year to 19 months;
Breast Feeding	19 months to 2 years.
Infant Care. The Prevention of	Diet List: 9 to 12 months; 12 to 15
Infantile Diarrhea	months; 15 to 24 months; 2 to 3
Table of Heights and Weights	years; 3 to 6 years.
	Instructions for North Carolina Midwives

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THE Health Bulletin



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EXTRACT OF ADDRESS BY AMBASSADOR DANIELS AT THE UNVEILING OF THE TABLET TO JOHN D. ROCKEFELLER AT THE FEDERAL HEALTH DEPARTMENT, MEXICO CITY, SEPT. 18, 1937

"The ancients built walls about their cities—gunpowder rendered them impotent; owners of "haciendas" built like walls for privacy and protection—they no longer are effective against modern machines.

"Nations relied upon Gibralters and oceans for protection. The airplanes have destroyed this ancient security.

"Countries may try to be super-national and live unto themselves by erecting trade barriers, providing quotas, employing armies of agents to keep out what other nations grow or manufacture. By diligence, a large measure of success in this "live unto yourself" policy, often more injurious than helpful, may be achieved. But no wall has been erected so high, no barrier constructed so strong, no cordon stretched so effectively as to confine germs and bugs and enemies to man, animals or plants, to the confines of any one country. Every wind that blows carries germs and spores and bacteria across rivers and mountains and oceans. No high tariff walls, no battalion of customs officials, no army of G-Men can shut out the diseases which afflict other countries.

"Mr. Rockefeller, when he established the Health Foundation, must have been moved by the impulse that caused Disraeli to declare: 'The Public Health is the first duty of the statesman.' Mr. Rockefeller regarded it also as a high call to philanthropy. In his lifetime he invested five hundred and thirty million dollars in his Foundation for education, health and philanthropy in many countries.

"It is only in comparatively recent years that governments and physicians and philanthropists have sensed the importance of preventive medicine and public health. Luther Burbank, referring to the long neglect, once said: 'If we had paid no more attention to our plants than we have to our children, we would now be living in a jungle of weeds.' The high death rate among children has been a reproach to all nations. Let us rejoice that governments and individuals are seeking to end the reproach and to provide agencies for the care of children and the protection of public health. Meeting this vision and challenge is Mr. Rockefeller's greatest claim to the gratitude of the people of the earth. Mexico honors itself in honoring a philanthropist who permitted no national boundaries to narrow his practical interest in the public weal."

Notes and Comment

By THE EDITOR

WE are publishing again this year, following our custom, considerable information on the subject of tuberculosis. For several years, we have devoted most of our November issue to a discussion of that disease. The table setting forth the deaths from tuberculosis by counties in North Carolina for the year 1936 will be found on the outside back cover. By consulting this table, the reader may readily see a comparative standing of the counties in the matter of deaths from tuberculosis. The number of death reports by counties and by race are given in this table.

Since our issue last year, Dr. L. B. McBrayer who has been Managing Director for the North Carolina Tuberculosis Association ever since its organization in this State, has retired from the work on account of ill health. Dr. McBrayer has managed this service exceedingly well. The Tuberculosis Association has the copyright authority to sell the tuberculosis seals which are used at Christmas time. He has promoted the organization in nearly all parts of North Carolina with the result that many children and others have had the benefit of Sanatorium and Preventorium treatment at a time when most good can be accomplished. Many other worthy causes such as increase in public health nursing service has been added. We regret Dr. McBrayer's retirement as Managing Director, and we wish for him rest and comfort after so many years of strenuous work.

Dr. R. L. Carlton, City Health Officer of Winston-Salem, has been appointed Managing Director to succeed Dr. McBrayer. Dr. Carlton for several years has been a member of

the Board of Directors of the National Tuberculosis Association. We feel sure that Dr. Carlton will be able to carry on the successful work so long managed by Dr. McBrayer. We have requested a special article from Dr. Carlton which we are publishing elsewhere in this issue.

A great deal of money is being spent for the purpose of preventing and treating tuberculosis in North Carolina. It is expected that the new western State Hospital at Black Mountain will soon be completed and ready for the reception of patients. When this hospital is finally completed and full bed capacity reached, the State will have provision for the continual treatment of about 1,000 patients at the two State institutions. A group of clinicians are constantly at work among the school children of the State for the purpose of aiding in the early diagnosis of tuberculosis among them and all classes and work has been followed up actively by the county health departments, and by nurses employed by the State Board of Health. Several of the counties now have provision for modern treatment of patients suffering with tuberculosis. The best examples are Mecklenburg, Guilford, and Forsyth. Wake County has recently completed a small institution to be conducted in connection with its County Hospital for indigent patients. For the present this will, of course, necessarily be a caretaking institution. It is, however, a step in the right direction.

The interest of the writer has always been in the field of preventing tuberculosis among children for the reason that there is where the most effective results can be obtained at less cost. Since the writer has been

Editor of the Health Bulletin, tuberculosis in North Carolina as a cause of death has dropped in successive steps from number one place down to five or six or seven. Next to the control of typhoid fever, the success in control of tuberculosis is the best example of what scientific control measures may be expected to do in eliminating any communicable disease.

Tuberculosis nor any other communicable disease will be finally eliminated from this state until better housing, better food, and better living habits are available to the lower and more ignorant classes of people and practiced by them. Such a condition will require prolonged educational work as well as a great deal more generosity on the part of the more comfortably circumstanced people in the state.

As a concrete example of what we mean by the latter statement, we can best illustrate by quoting from a letter written by one of the nurses employed by the State Board of Health last year as a special demonstration of public health work in a county which does not have a whole time health department. This nurse writes late in July as follows: "This week along with my main work I made a visit into a colored man's home on Mr.—— (the county political boss who was instrumental in keeping his county Board of Commissioners from making an appropriation for public health work in that county) farm where tuberculosis seems to be running wild. There are nine people in a four room house. Two definitely have tuberculosis and three have very suspicious signs. No Sanatorium treatment is available and it is presenting quite a problem. They all seem reluctant to believe that they really have tuberculosis and are not careful in their habits."

This letter was written to the State Board of Health on July 24. This same nurse, under date of August 21 after the County Board of Commissioners declined to make appropriation for public health work, as stated above, allegedly on the orders of this county political boss, writes as follows: "I had a talk today with Mr.—— and tried to impress upon him the large amount of work the midwives are now doing in this county and the grave need their patients have for medical supervision. It is plain to see that the maternal and infancy problem, like the tuberculosis sufferers, have no sympathy from him."

Our comment on the above is this, as long as the responsible, respectable, humane people in any county tolerate such exhibitions of bossism and cold-blooded inhumanity, there is little that the State Board of Health or any other organization can do about such situations. We do, however, have the satisfaction of knowing that in our time we have seen many such bosses thrown out of power and we are encouraged to believe that the counties tolerating such situations at present are considerably fewer than at any time in the past.

Mortality Rates for Both Races

A recent study of mortality among Southern Negroes, made by the U. S. Public Health Service, reveals some interesting facts: Mortality from all causes in recent years has declined for both races, but more for the white than for the colored. The principal causes for which the mortality rates have declined are the acute infectious diseases, respiratory tuberculosis, stomach diseases and diseases of early infancy. The recorded mortality from syphilis has increased more rapidly among colored, and the recorded mortality from locomotor ataxia and general paralysis of the insane has decreased for white, and remained about stationary for colored.

New Policies Adopted Governing Inspection of Cafes by Local Health Departments

By R. E. Fox, M. D., Director County Health Work

EFFECTIVE March 11, 1937, the members of the State Board of Health, through Dr. Carl V. Reynolds, State Health Officer, inaugurated new policies pertaining to the inspection of food handling establishments by local health departments.

Local sanitarians who have demonstrated their ability to check consistently with the district state inspectors, and who have filed reports of their inspections with the Division of County Health Work, are allowed to post state grade cards in inns, hotels, restaurants and other public eating places.

Considerable confusion and duplication of effort has existed in some local health departments on account of the local inspector not being al-

lowed to post state grade cards, and in many instances local cards have been posted because this privilege has not been allowed. The change in board policies is designed to place the responsibility for maintaining sanitary conditions in public eating places on the local health department.

It is also the intention of the State Board of Health to give this authority only to those local health departments which are doing satisfactory work in the saniting of public eating places. A list of the local departments officially authorized to post state grade cards, the names of the health officers, and the names of the local sanitarians who have qualified for this Honor Roll as of October first, follows:

<i>City Health Departments</i>	<i>Health Officers</i>	<i>Sanitarians</i>
Asheville	Dr. John W. Williams	Mr. Harry McDonnold Mr. Cloyd Pennell
Greensboro	Dr. C. C. Hudson	Mr. Henry C. Liles Mr. Geo. Brandt
High Point	Dr. R. A. Herring	Mr. John Huff
Winston-Salem	Dr. R. L. Carlton	Mr. R. L. Wagner
<i>County Health Departments</i>	<i>Health Officers</i>	<i>Sanitarians</i>
Avery-Watauga-Yancey	Dr. C. H. White Dr. Robert R. King	Mr. Carson C. Foard Mr. Harry Webster
Buncombe	Dr. H. L. Sumner	Mr. Frank Nelon
Craven	Dr. John S. Anderson	Mr. F. F. Armstrong
Forsyth-Stokes-Yadkin	Dr. J. Roy Hege	Mr. R. D. Warwick
Granville	Dr. J. A. Morris	Mr. W. B. King
Haywood	Dr. C. N. Sisk	Mr. Geo. Kunze
Jackson-Swain	Dr. C. N. Sisk	Mr. Ben Sloan
Lenoir	Dr. Z. V. Moseley	Mr. L. L. Bridgers
Richmond	Dr. R. M. Bardin	Mr. R. M. McDaniel
Harnett	Dr. W. B. Hunter	Mr. K. W. Ballentine
Hertford	Dr. T. G. Faison	Mr. J. R. Taylor
Sampson	Dr. J. H. Williams	Mr. Algie Wilson
Wilkes	Dr. A. J. Eller	Mr. G. S. O'Dell
Bladen	Dr. R. S. Cromartie	Mr. T. J. Fowler
Macon	Dr. C. N. Sisk	Mr. H. H. Plemmons
Transylvania	Dr. C. N. Sisk	Mr. E. L. Hinton

The Fight Against Tuberculosis In North Carolina Must Go On

By R. L. CARLTON, M. D., *Managing Director*
N. C. Tuberculosis Association, Winston-Salem, N. C.

THE tuberculosis death rate in the United States declined from 200 per 100,000 in 1900 to 54 in 1935. Twenty years ago tuberculosis was the leading cause of death—today it is in seventh place. This decline indicates a public health achievement which ought to be fairly satisfying to the people of this country. Because the tuberculosis death rate has declined we call the anti-tuberculosis campaign a "winning fight."

But a winning fight may not yet be fully won! It must be pointed out that there are still 70,000 deaths from this disease annually; that it is the leading cause of death between the ages of 15 and 45, the most productive years of life, and that tuberculosis is an infectious and therefore a preventable disease.

We have to face the somewhat disconcerting fact that the tuberculosis death rate did not continue its decline in 1936 but went up from 54 to 55 per 100,000 for the United States and in North Carolina rose from a rate of 56.6 in 1935 to 60.6 in 1936. We lost 2,104 lives to tuberculosis last year—an increase of 139 over the 1935 toll.

With these facts in mind we must not rest content with what has been accomplished. The fight must be carried on until it is won. We cannot afford to let our past success, which just now seems to be lagging, make us over-confident. To slacken our efforts now even for a time means to lose all we have gained, and to start over. There is no reason to believe that tuberculosis death rates much lower than we have ever had in North Carolina are unattainable, but this

will depend upon extending and intensifying present methods of control. The tuberculosis fight is not one for health workers to carry on alone. It is a task calling for the best teamwork in every county of our state.

We know that efforts to prevent tuberculosis would be much more effective if the disease could be detected in the "seedling" stage. Often in childhood there exists the condition which is known as the childhood type of tuberculosis. It is revealed by the tuberculin test, which tells us if the tubercle bacillus has already been implanted, and the X-ray gives a picture of how the body has responded. All children in whom lesions are discovered are not doomed to break down with the adult type of the disease. Some children will have responded so perfectly that their infection serves as a protection similar to that afforded by a vaccine. But the others provide the majority of cases of adult tuberculosis later. Science has demonstrated this.

If we are to attack tuberculosis at a time when the chances are greatest for the success of preventive measures we must concentrate on the period of childhood. Years ago doctors noticed that tuberculosis "runs in families" and concluded that it was inherited. Now we know that tuberculosis "runs in families" because children living constantly in the environment of a tuberculous person receive into their bodies so many tubercle bacilli that the resistance is overcome. Not infection merely but massiveness or repeated dosage influence the course of events tremendously.

So, modern science has provided through the tuberculin test and the X-ray the means for knowing, in any given child, whether danger exists or not. If we use fully the knowledge that is ours and the modern scientific means which are at our disposal tuberculosis can be controlled.

The challenge is ours. Everyone must have a part. Parents must know how to so train their pre-school age children that proper habits of health will be formed; teachers must

explain in an understandable way to boys and girls how tuberculosis may be prevented; children must be shielded from undue strain, physical and mental; there must be constant medical oversight; doctors, nurses, clinics, schools, volunteer organizations, sanatoria, health departments and other agencies must cooperate in disseminating knowledge about tuberculosis.

Knowledge is our greatest weapon. The fight must go on!

Beware False Security

By N. C. TUBERCULOSIS ASSOCIATION

SO vast has been the progress against tuberculosis in the United States during the past thirty-five years that the proportions of the task that remains ahead are apt to escape us. The sharp decline in the mortality rates has created a widespread feeling of false security that even the abrupt halt of the downward trend in many parts of the country has failed to dispel.

Timely, indeed, then, and full of importance are these comments from a recent message of Dr. J. A. Myers, newly-elected president of the National Tuberculosis Association:

Today . . . we are at the cross-roads. We must not be content that tuberculosis has been reduced so that its position as a cause of death may soon be compared with other diseases. The organization, the scientific background, and the facilities are at hand for us to eradicate this disease from the list of human ills. If we are sufficiently persistent and thoroughly convinced of the value of epidemiological work we shall search for, treat, or isolate every case of tuberculosis now extant, as well as prevent the development of new cases. Tuberculosis then will no longer be a potential threat to the health and life of everyone. There are still those uninformed or misinformed who obstruct the work. Such

factors as carelessness, neglect, and procrastination, ever present in human endeavors, still continue to retard progress. Overconfidence in our ability to progress and under-estimation of the seriousness and significance of the remaining problem threaten the future program. Therefore there is every need to continue the work of the National Tuberculosis Association. In every community we must constantly repeat the facts concerning this disease, ever remembering the statement of Laennec: "Do not fear to repeat what has already been said. Men need these things dinned in their ears many times and from all sides. The first rumor makes them prick up their ears, the second registers, the third enters."

Without question we are still a long way from the goal which Dr. Myers points out. Here in North Carolina a slight increase in the 1936 tuberculosis death rate indicates the continuing need for a vigorous program. Twenty-one hundred deaths within the state last year challenge those who would rest on their oars. And for every death there are from five to ten others ill with the disease, all a menace to life and health.

Nearly over, the fight against tuberculosis? No, not yet. There still is much to do.

Housing and Health

By ROY NORTON, M. D.

Recent national housing legislation contains the statement that, "Slums, blighted areas, or unsafe, insanitary or overcrowded dwellings, or a combination of these conditions—are inimical to the general welfare of the Nation by encouraging the spread of disease and lowering the level of health, morale, and vitality of large portions of the American people."

Results of a study in Detroit indicate that tuberculosis in districts with more than one person per room is from two to three times greater than in districts with 0.6 persons per room. Infant mortality was more than fifty per cent greater in the former areas. It was also observed that influenza and pneumonia played the greatest havoc in crowded areas.

There is conclusive evidence that health and housing are intimately related. Those with fundamental weaknesses such as biological unfitness, mental deficiencies or chronic ill-health cannot well meet the forces of competitive existence and are reduced to a low economic status. Sometimes the cause and effect may be reversed. In a great many cases the poor economic status is due to unpredictable misfortune rather than to physical or mental unfitness. With low incomes there are fewer opportunities for self-improvement, proper nourishment, adequate medical and dental care, or healthful working and living environment. In the vicious cycle of poor housing and bad health we find impure water supplies, insanitary disposal of human wastes, overcrowding, in adequate natural or artificial lighting, lack of heating facilities, excessive dampness, dilapidation and faulty screening against flies and mosquitoes. Rat infestation,

malaria, typhoid, amebic dysentery, rickets, scurvy, tuberculosis, pneumonia, rheumatic attacks and influenza are likely to occur with greater frequency and severity with bad housing conditions.

Those of us who live in comfortable homes tend to feel that times are good and "all's well with the world." We go to ride and take our guests along the best streets or rural highways. It is enlightening to occasionally ride, or better still, walk along the back streets, alleys, and small country roads. One finds the cows, mules, horses and even the dogs of some of the well-to-do better housed than some of the mothers and children of the poor. Leaky roofs, dirty open wells, a few old boards and a cut-open guano sack for a privy, small windows with no glass panes and with no screens, a few small, dark, crowded rooms are seen here and there. Even in the country one frequently finds no garden, no chickens, no pigs, and no family cow at many of the houses.

The reaction of some is that "if these people have no more energy and self-respect than to live in these dumps, why should anyone else worry about them?" "What if their babies do die like flies? They have more children than they and the community need. Such lazy and unfit people are being pampered too much nowadays anyway." The answer to such superficial and thoughtless statements is that if only the essentially unfit suffered thus, it would not be so bad. Many, many of these poorly housed people have been ensnared in this vicious quicksand bog of poor housing to poor health and back again but lower and lower all the time and farther from the en-

vironmental level of encouraging hope, ambition and self-reliance that helps others to keep trying.

What can the community, the county, the state, the American nation expect of its children brought up in such neglected environment? The essential hereditary factors may be chiefly good or bad just as they may be in our so-called best homes. During pregnancy the mother is overworked, undernourished and usually has no medical or dental care. The handicap for the child begins. An ignorant midwife may preside at the delivery. Overwork, a poor diet and lack of rest may reduce the nutritive value of the greatest boon to the child's future health—breast milk. Improper clothing, lack of sunlight, inadequate diet, poor ventilation, overcrowding, flies, mosquitoes, bedbugs, rats and impure water reduce the growing child's resistance. Lack of dental care, neglected tonsils, colds and other largely preventable infections offer handicaps. Tuberculosis and syphilis thrive in such an environment. If the child survives, he is handicapped in school, becomes discouraged and may turn to petty mischief and thence to crime. Miraculously, and almost impossible of belief when one knows the difficulties in the way, many of these children become fair or even excellent citizens—real community assets. Many others, however, are caught inextricably in the whirlpool of poor health, low income, bad housing. Round and round they go with monotonous confusion and bewilderment. Overcrowding and filth—a far advanced tuberculous grandmother sleeping with two infant grandchildren, whose syphilitic mother is hired out as maid for "rich folk's children." Innumerable flies going from the grandmother's sputum to crawl on the tables and faces of neighbor children of the well-to-do

down the street. Another generation of scoffers again wonder, "Why do some people have so little self-respect as to live in such shacks?"

Lincoln said that this nation could not long survive half slave, half free. Our own Aycock and others have given their lives that the masses might be freed from the bondage of ignorance. The greatest and most-needed crusade of all has been the longest neglected—release from the shackles of ill health and preventable disease, the promotion of abundant healthful living.

Wanted! A New Set of Parents

A MUCH-NEEDED truth has been expressed by Dr. Luther A. Weigle in his book, "Training of Children in the Christian Family," published by the Pilgrim Press, of Boston. Dr. Weigle quotes, approvingly but anonymously, the following paragraph from a modern educator: "I do not hesitate to say that in my opinion the children of today do not need vocational guides so much as they need a new set of parents; parents who have spunk enough to climb back upon the thrones in their own households which they have abdicated in favor of their children; parents who have energy enough to get their children out of bed in the morning early enough for them to wash their faces, comb their hair, and lace their shoes without the school's being obliged to give promotion credit for their doing so; parents who, when the shades of night begin to fall, look after their boys with the same degree of care that they give to their bull pup, which they chain up lest he associate with the strange cur on the street. We have autocracy enough in education; what we need most is authority in the home."—*Christian Observer.*"

Shall North Carolina Have Safer Marriage Laws?

By MRS. J. HENRY HIGHSMITH

NORTH CAROLINA has practically no laws for safeguarding marriage and the beginning of the home. On the statute books are two laws, neither of which as it operates today is worth the effort to enforce it. This is the opinion of one register of deeds who says that the present marriage law which requires the male applicant for a marriage license to sign an affidavit saying that he has no active tuberculosis or a venereal disease, and has not had for two years prior thereto, is totally ineffectual. This law is an alternative to a prior law which required a health certificate from the groom in order to obtain a marriage license. Neither law requires anything of the prospective bride—not even a written statement to the effect that she has no tuberculosis or a venereal disease in the active stage.

But has not the time come when North Carolina can and will take steps to protect its children from the ravages of venereal disease? It is estimated that there are 20,000 children under fifteen years of age in North Carolina today who have syphilis inherited from infected and neglectful parents. And yet this large number is not the whole story. Only about 43 percent of syphilitic babies live to reach ten years of age. Therefore, it is safe to say that at least 70,000 other babies were born syphilitic but died in infancy or early childhood.

When it is known that children inherit blindness, feeble-mindedness, insanity, susceptibility to disease and premature death from syphilitic parents, and when it is further known

that 90 per cent of these tragedies could be prevented through an enforced law requiring a Wassermann test of both man and women before marriage and another law requiring the proper treatment of expectant mothers showing a positive blood test, does it not seem that public opinion would demand this protection for innocent, helpless childhood?

Fortunately, there is a growing sentiment today in behalf of these measures. A poll conducted recently by the American Institute of Public Opinion found that 92 per cent of those voting on the question, whether or not there should be premarital Wassermann tests, were in favor. Of all the votes cast in the Southern states, 94 per cent were favorable.

In connection with the campaign being waged against syphilis, a number of states have enacted laws requiring, as a prerequisite for the issuance of a marriage license, evidence of negative Wassermann or similar blood tests. Connecticut enacted such a law in 1935 and, contrary to many predictions, it works and works well. As evidence that it has popular support, about 10 per cent more laboratory examinations were made for prospective brides and bridegrooms during the first five months of 1937 than for the same period in 1936. Illinois passed a bill in the spring requiring compulsory health examinations for all couples applying for marriage license, which went into effect July 1, 1937. Michigan has a similar law that goes into effect October 29, 1937, and New Hampshire's law becomes effective October 1, 1938. New Jersey is preparing a bill patterned after the Con-

necticut law to be introduced in the 1938 New Jersey legislature.

North Carolina also will sponsor a marriage license law at the next session of the General Assembly, according to Dr. Carl V. Reynolds, Secretary of the State Board of Health and State Health Officer. He says a marriage law is a part of the State's program to control venereal disease, and that he will press the passage of the bill when the Legislature meets in 1939.

As evidence that such a law is

needed, witness the number of cases of syphilis that are being reported daily to the State Board of Health—an average of 33 a day, 1,000 a month, or 12,000 a year. A fair estimate places the number of syphilitics in North Carolina at 300,000. Without restrictions for preventing the spread of the disease and proper means of treatment for those infected, this will mean that we will continue to have 100 new cases of infection every day, and the birth of ten new-born syphilitic babies every day.

Budgets—And Budgets

By N. C. TUBERCULOSIS ASSOCIATION

NOW is the time when all good men and women begin to plan to make their New Year's resolutions. The keeping of a budget probably gets first place on the list of improvements we resolve to make in our daily lives. And in connection with that household budget, we should like to make a suggestion. Before we go in for portioning out the family income, let us give a thought to another far more important budget. It should come first on the list of New Year's resolutions. Why? Because no matter how much you plot and plan and dig and delve and save and become as rich as Croesus, it doesn't matter in the least if you haven't your health.

And so here's a health budget for you. Juggle it as you will, but don't rob Peter to pay Paul. There are just so many items that must be included if you are to get the best results out of your health income.

In planning this health budget everything will be centered about the body home—after all, everyone's real home. First you must know just what sort of a home your body is.

Can it give the proper amount of service? Can it compete with other homes about it? Or do its boards squeak, its windows rattle, does its roof leak or are its ceilings cracked and its attic untidy with the accumulation of years of neglect? The best way to find out about its condition is to have a thorough overhauling of your body by a good doctor. If he finds any boards that are rickety, such as a weak heart, a poor liver, bad tonsils or teeth, you can take care of them before real trouble occurs.

"That man is all right," Woodrow Wilson once said, "but the house he lives in is dilapidated and it looks as if he would soon have to move out." The man did move out. He died.

So let that be a lesson to you on the body part of the health budget!

Then as you allow so much of the money budget for lighting, heat and fuel so must you put thought into planning the fuel for the body. Food and plenty of water are the fuel that keeps it running. Eat the right foods as conscientiously as you buy the best wood or coal. Plenty of vege-

tables; more meat if you are doing hard physical labor than if you have work that keeps you confined to a desk; fruit to keep the digestive apparatus functioning properly; milk; bread and cereals, the old stokers, and enough sweets to add variety but not too many.

Fresh air is a big part of the health budget. That is indirectly associated with practically every other item. Fresh air day and night helps to keep every part of the body working well. It is a cleanser, a purifier, and without it one's home would become as dusty and musty as the old-time unopened "guest chamber." Not only the lungs need the fresh air but every part of the body responds to this tonic and will give better service. Fresh air is a sickness preventive and is cheaper than any other medicine.

Rest is also most essential. Everybody needs rest so that nature can replace the elements actually burned up by the wear and tear of life. When there has been a strain either mental or physical the body needs more rest. Try going to bed earlier when the office or business has seemed particularly trying. Mothers, go to bed earlier when the children or housework have given you a difficult day. The next day's efficiency will be greatly increased.

Exercise should be in the health budget. Exercise keeps every muscle in good working order and, if only a mile walk a day is possible, that is better than nothing. The more exercise in the sunshine and fresh air the better will be the physical service rendered in later years.

Play is also necessary, for this is stimulating when taken at the proper time and is of the right kind. Play is mental relaxation. Anything that is of mental benefit is pretty sure to be of physical help.

These are a few of the main items in the health budget. They will practically guarantee happiness for later years and for that reason if for no other they are closely linked with the money budget. As one works toward a goal in money so can one work toward a goal in health. Prevention is far better than cure, just as a nest egg is better than debts.

And so for the New Year's toast supreme—We give you the Health Budget.

CHRISTMAS SEAL SERMON

By REV. RALPH W. SOCKMAN,
Christ Church, New York City

IT is eminently fitting that Christmas, the Birthday of the Great Physician, should be used as the occasion for a health crusade. The Nazarene healer came that men "might have life and have it more abundantly." He restored their bodies as well as redeemed their souls. So primary was his concern for men's physical welfare that good health has now become a fundamental plank in the Christian gospel.

The Great Physician was especially interested in anything affecting the life of youth. In flaming words he declared that for anyone who misled the young, it were better that a millstone be hanged about his neck and that he be dropped into the depths of the sea. We can well imagine, therefore, how the Nazarene healer would have been out to fight the dread disease of tuberculosis, which is indeed the most deadly foe of young people. Cancer and heart disease harvest their victims in maturity and old age, but tuberculosis cuts off the young in the freshness of life's morning. The latter scourge still merits the sinister title of the "White Plague." It is the largest single cause of death between the ages of fifteen and forty-five.

But while tuberculosis still runs wild in its widespread slaughter, it is being brought under control faster than any other major disease. We have no specific cure or preventive agent, but by early discovery of cases, by proper hospitalization, by public health nursing, and education, we can check its ravages. The increasing thousands of escaped prisoners are living evidence that the grip of grim "T B" can be broken.

There are few families in our land into whose circle tuberculosis at some time or other has not come. Its danger comes home to all of us. Likewise the campaign for its cure ought to concern each of us. The battle against tuberculosis is not primarily to be fought by a few specialists in laboratories but by a popular uprising of prevention and education. Toward this necessary end the Christmas Seals are admirably adapted. They serve to arouse the public conscience as well as to enlist the public support.

It is heartening to be enlisted in a winning campaign. This fight is gaining the day. Through the work stimulated by the national, state, and local tuberculosis associations, more than 1,200 institutions with over 95,000 beds have been provided. Behind those figures are happy faces and restored families too numerous to count. We are confident that Americans will continue the conquering advance.

BEHIND THE SHADOWS

"Behind the Shadows" is a sound film, or "talkie," dealing with the prevention of tuberculosis among children. It is not only instructive but highly entertaining to both children and adults. This film is available for showing to groups such as schools and clubs, and may be had for the price of postage both ways by writing to Dr. R. L. Carlton, Manager, North Carolina Tuberculosis Association, Winston-Salem, N. C.

THE MISSION OF THE CHRISTMAS HEALTH SEAL

By N. C. TUBERCULOSIS ASSOCIATION

WHAT would happen if most of the present day machinery which combats tuberculosis were put out of operation tomorrow? Suppose hundreds of tuberculosis sanatoria and preventoria closed their doors? Suppose all the tuberculosis associations, and all the Health Departments, national, state and local shut up shop? Suppose no more school children were given the tuberculin test? Suppose all the Health Departments quit sending nurses to follow up the tests? Suppose many scientists were forced for lack of funds to stop trying to find better weapons for preventing and treating tuberculosis? It would be like removing all the fire-fighting forces from a burning forest because the fire was half out.

For many years to come the battle against tuberculosis must go on. This battle of our forefathers, of ourselves, and of our children is fought and financed by the people whom it saves from an army of invisible, uncountable instruments of death.

Jacob Riis in the letter of introduction which he wrote in 1907 to present the idea of the Christmas Health Seal to the people of America said in effect: "We do not want millionaires to finance the fight against tuberculosis. We want all the people to do it, for only in so doing will they learn how to help themselves."

The Christmas Health Seal is not just a way to raise money. It is a way in which everyone who has a spare penny can help to protect himself and his children and his children's children against a foe that was old when the pyramids were young. It is a way of making all the people stop to think for a little while each year that health is something to

be sought after and worked for with all their hearts. It is a way of making us realize that no one is safe from "the pestilence that walketh in darkness" until all of us are safe.

To borrow again from that momentous letter which introduced the Health Seal to America—We know that the Christmas Seal is not good for postage, but that every other way it is good—for the man who buys it and puts it on his letter; for the clerk who cancels the letter with a glad thought for little children with every whack; for the postman who delivers it with a smile as broad and as good as Christmas itself; and, last of all, for the great cause which is unique in the annals of history, the nation-wide educational campaign against tuberculosis which this year celebrates its 31st anniversary.

John M. Gibson With Alabama State Board of Health

Some of our readers are familiar with the Sanatorium Sun, a monthly periodical published by the North Carolina Sanatorium for Tuberculosis. For the past ten years, Mr. John M. Gibson has been editor of that publication.

Several months ago Mr. Gibson was offered the position as Director of Health Education with the Alabama State Board of Health. He went to Montgomery early in the year and has been sending out some excellent material from that organization. His radio talks and weekly press articles are full of information of value for health workers.

In addition to his work with the health department of Alabama, Mr. Gibson conducts a widely read syndicate feature service in southern newspapers.

It has been a source of regret to us that Mr. Gibson found it necessary to leave North Carolina, but we congratulate him upon the opportunity for fine service in the Alabama field.

BOOK REVIEW

"Ten Millions Americans Have It"—

By S. William Becker, M. D. J. B. Lippincott, New York. 1937. Price \$1.35.

THIS little volume of 220 pages of clear, legible type is written in interesting style and can easily be comprehended by lay readers. Such chapter headings as Early Syphilis, Late Syphilis, Prenatal Syphilis, How They Get It, Great Imitator, Diagnosis, Treatment, Cure, Social Problems and People versus Syphilis suggest the contents. There are eight illustrations and charts. The statement that ten million Americans have syphilis and that half of them do not know they have it sounds startling but is probably conservative and one feels inclined to agree with the author that syphilis control is second only to nutrition among the major health problems today. The few seemingly unnecessary repetitions do not seriously detract from the book. By reading it many should come to know syphilis as the Great Plague that it is. The disease thrived and became rampant under the protecting cloak of ignorance, bigotry, shame, smugness and indifference, and private practitioners and public health workers everywhere welcome this bringing of the subject out into the open where syphilis can be attacked and controlled just as have other serious infectious diseases such as tuberculosis, typhoid and diphtheria. Your library should have a copy.

—By ROY NORTON, M. D.

TALK

Folks talk so much of the soul

From heavenly joys debarred

And not enough of babes unborn,

By the sins of their fathers scarred.

—ELLA WHEELER WILCOX

DEATHS FROM TUBERCULOSIS OF THE RESPIRATORY SYSTEM—BY COUNTY AND RACE: 1936

TOTAL DEATHS (TUBERCULOSIS, ALL FORMS) 2,104

COUNTY	BY PLACE OF DEATH			BY PLACE OF USUAL RESIDENCE			COUNTY	BY PLACE OF DEATH			BY PLACE OF USUAL RESIDENCE		
	Total	White	Colored	Total	White	Colored		Total	White	Colored	Total	White	Colored
Total, State	1,905	752	1,153	1,748	664	1,084	Johnston	31	14	17	32	14	1
Alamance	14	6	8	15	6	9	Jones	3		3	4	1	
Alexander	1	1		1	1		Lee	8	1	7	10	3	
Alleghany	2	2		2	2		Lenoir	34	7	27	34	7	
Anson	13	3	10	15	3	12	Lincoln	6	3	3	7	3	
Ashe	7	6	1	7	6	1	McDowell	4			4	4	
Avery	8	4	4	8	4	4	Macon	10	8	2	10	8	
Beaufort	15	8	7	16	8	8	Madison	6	6		6	6	
Bertie	25	12	13	25	12	13	Martin	15	6	9	16	6	
Bladen	10	1	9	10	1	9	Mecklenburg	74	30	44	79	31	
Brunswick	5	1	4	6	1	5	Mitchell	2	2		2	2	
Buncombe	314	199	115	129	93	36	Montgomery	7	1	6	7	1	
Burke	9	8	1	8	7	1	Moore	9	7	2	8	4	
Cabarrus	13	7	6	14	8	6	Nash	29	9	20	32	10	
Caldwell	3	3		3	3		New Hanover	35	8	27	35	9	
Camden	3		3	3		3	Northampton	24	1	23	24	1	
Carteret	8	6	2	8	6	2	Onslow	5	2	3	5	2	
Caswell	3		3	5	1	4	Orange	14	6	8	16	6	
Catawba	12	8	4	13	9	4	Pamlico	2		2	2		
Chatham	10	5	5	10	5	5	Pasquotank	15	3	12	17	3	
Cherokee	6	4	2	6	4	2	Pender	4			4		
Chowan	5	1	4	5	1	4	Perquimans	3	2	1	3	2	
Clay							Person	11	2	9	12	3	
Cleveland	15	9	6	15	9	6	Pitt	42	12	30	45	12	
Columbus	11	3	8	11	3	8	Polk	5	3	2	5	3	
Craven	20	2	18	22	3	19	Randolph	10	8	2	11	9	
Cumberland	16	8	8	16	7	9	Richmond	26	5	21	26	5	
Currituck	6	2	4	6	2	4	Robeson*	26	4	14	27	4	
Dare	5	3	2	5	3	2	Rockingham	21	16	5	27	17	
Davidson	13	4	9	13	4	9	Rowan	21	7	14	21	7	
Davie	4	1	3	4	1	3	Rutherford	10	7	3	10	7	
Duplin	18	6	12	20	7	13	Sampson	17	5	12	20	8	
Durham	80	16	64	74	13	61	Scotland	6	1	5	9	2	
Edgecombe	39	6	33	39	6	33	Stanly	10	5	5	10	6	
Forsyth	92	16	76	95	16	79	Stokes	5	4	1	6	5	
Franklin	16	4	12	17	5	12	Surry	15	14	1	17	16	
Gaston	17	11	6	20	11	9	Swain	8	8		8	8	
Gates	2		2	3		3	Transylvania	1	1		1	1	
Graham							Tyrrell	4	2	2	4	2	
Granville	17	3	14	18	3	15	Union	22	8	14	22	8	
Greene	9	1	8	12	1	11	Vance	14	7	7	13	6	
Guilford	51	24	27	54	27	27	Wake	63	26	37	65	28	
Halifax	19	4	15	20	4	16	Warren	10		10	10		
Harnett	18	7	11	18	8	10	Washington	7	1	6	7	1	
Haywood	7	6	1	7	6	1	Watauga	2	2		2	2	
Henderson	5	3	2	9	6	3	Wayne	92	10	82	83	12	
Hertford	10	2	8	11	3	8	Wilkes	10	8	2	11	9	
Hoke*	49	14	34	18	7	11	Wilson	54	10	44	55	10	
Hyde	1	1		1	1		Yadkin	4	3	1	3	2	
Iredell	14	5	9	15	6	9	Yancey	4	4		2	2	
Jackson	5	3	2	6	3	3							

* Hoke—1 Indian.

*Robeson—8 Indians in place of deaths and 9 Indians in place of residence.



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DECEMBER, 1937

No. 12



—PHOTO BY DARTT

J. A. MORRIS, M. D., GRANVILLE HEALTH OFFICER

For eighteen years Dr. Morris has been the successful full-time health officer of Granville County. It is a mystery to his friends how he manages to do so much work. He is now 74 years old and a living example for every man who thinks he is through at 50 or 60. In his earlier days he had to quit active practice after some twenty years of it, because of ill health. Abstemious living, much outdoor life and a crusader's interest in preventive medicine have sustained him in his work. Now at 74 he is Vice-President of the N. C. Health Officer's Association and his vision is forward.

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FREE HEALTH LITERATURE

The State Board of Health publishes monthly THE HEALTH BULLETIN, which will be sent free to any citizen requesting it. The Board also has available for distribution without charge special literature on the following subjects. Ask for any in which you may be interested.

Adenoids and Tonsils	German Measles	Scarlet Fever
Cancer	Health Education	Smallpox
Constipation	Hookworm Disease	Teeth
Chickenpox	Infantile Paralysis	Tuberculosis
Diabetes	Influenza	Tuberculosis Placards
Diphtheria	Malaria	Typhoid Fever
Don't Spit Placards	Measles	Typhoid Placards
Eyes	Pellagra	Venereal Diseases
Flies	Residential Sewage	Vitamins
Fly Placards	Disposal Plants	Water Supplies
	Sanitary Privies	Whooping Cough

SPECIAL LITERATURE ON MATERNITY AND INFANCY

The following special literature on the subjects listed below will be sent free to any citizen of the State on request to the State Board of Health, Raleigh, N. C.

Prenatal Care	Baby's Daily Time Cards: Under 5 months;
Prenatal Letters (series of nine monthly letters)	5 to 6 months; 7, 8, and 9 months; 10, 11, and 12 months; 1 year to 19 months; 19 months to 2 years.
The Expectant Mother	Diet List: 9 to 12 months; 12 to 15 months; 15 to 24 months; 2 to 3 years; 3 to 6 years.
Breast Feeding	Instructions for North Carolina Midwives
Infant Care. The Prevention of Infantile Diarrhea	
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THE Health Bulletin

PUBLISHED BY THE NORTH CAROLINA STATE BOARD OF HEALTH

Vol. 52

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No. 12

Notes and Comment

By THE EDITOR

THIS issue is number twelve and closes the 52nd volume of the Health Bulletin. Fifty-two years of almost continuous publication have now been completed. There has been nothing of special significance to record this year except the extension into some areas of the Maternity and Infancy Centers conducted by the State Board of Health in cooperation with the local authorities and with the Children's Bureau.

There has also been a nation-wide effort made to control the spread of syphilis and other venereal infections. The North Carolina law enacted in 1919 making it compulsory for persons suffering with syphilis to take treatment has come in for nation-wide commendation. There are today better facilities which are in reach of more poor people for the treatment of syphilis than ever before, a larger number of physicians are co-operating today in making treatment available than heretofore.

In October, a serious outbreak of sulfanilamide poisoning was reported from many sections of the United States. At least one death occurred in North Carolina. This occurred on account of the use of a special product which had not been sufficiently tested in the laboratories by the manufacturers before offering it for sale to druggists and physicians throughout the country. As these lines are written, the American Medi-

cal Association investigators have reported that it was not the sulfanilamide which caused the deaths but the mixture containing other drugs in which the sulfanilamide was mixed. Had the so-called Tugwell Bill which was before Congress a few years ago been enacted into law, these people would have been living, as the drug could not have been put on the market. If these deaths serve to impress Congress with the necessity of enacting a new pure food and drug law in conformance with the advice of the American Medical Association through which such occurrences would be prevented in the future, their lives will not have been sacrificed in vain.

Elsewhere in this issue we are publishing an article by Dr. Forest M. Houser of Cherryville. The subject is "Public Health Work Helps the Private Practitioners." Dr. Houser is a successful practicing physician. He is the son of a physician. He has seen the changes affecting the medical profession gradually come about, most of them beneficial to both physician and patient.

One example: His father paid about \$12.00 for a 10,000 unit dose of diphtheria antitoxin for which he pays 50 cents. The State Board of Health battled hard for that. Please read the article. It represents the convictions of a majority of physicians who are making a living in the practice of medicine.

Edgecombe Negro School Wins National Negro Health Week Award

ABOUT the middle of October, the Editor was invited to Edgecombe County by the Health Officer, Dr. L. L. Parks, to be present at the presentation of the certificate of award won from the United States Public Health Service by one of the Negro schools in that county. The occasion was a county wide colored teachers meeting and the award was because the school receiving it, the Coakley, had submitted the best record during celebration of National Negro Health Week received from any other school in the country except the Douglas High School in the City of Baltimore, with which the Edgecombe school was paired for honors. In addition to the Coakley School, 14 other Edgecombe County Negro schools received certificates for excellence in their cooperation in the celebration of Negro Health Week last April. Readers of the Health Bulletin may remember that we published an article in the March issue of the Health Bulletin written by Dr. Walter J. Hughes, a Negro physician employed by the State Board of Health, describing the history and observance of National Negro Health Week. This year the United States Public Health Service sponsored the program and made the awards for special efforts.

It is noteworthy to remark that last year, 1936, was the first observance of Negro health week in Edgecombe County. Dr. Parks as Health Officer of the county gave every aid possible to the Negro teachers and through his department nurses gave them practical assistance in carrying out the purposes of Negro Health Week. Dr. Parks has found that all the colored schools in his county are

interested in health education. They are making every effort to stimulate the colored children to an appreciation of proper diet, the observance of health rules, and the requirements of a general health education program. It is gratifying to this department to note the progress being made in Edgecombe County along these lines at this time under Dr. Parks' exceedingly able direction.

This Division of the State Board of Health undertook in the fall of 1931 to carry out a special health program in Edgecombe County. This was done on the urgent invitation of the late Dr. Julian Baker who was the lifelong friend of Dr. Parrott, the new State Health Officer at that time. The program could not be carried through as planned because of the fact that there was such little interest manifested in Negro health work. We found at that time that the white school population of the county was about 9,000 and the Negro school population about 15,000. The county every year was reporting an excessively high infant death rate. We confidently look for a change in this respect within a very few years, should Dr. Parks' excellent program receive the continued support of the leading people of Edgecombe County, including the medical profession, who are now assisting him in his plans for developing a thoroughly efficient county health department.

A Death From Diphtheria

A nurse working in a mountain county writes that although 700 children have been given toxoid, "one child whose parents refused it the protection when offered last summer, died yesterday from diphtheria."

Yes, health education is the most necessary study in any school.

Program to Aid Hard of Hearing

By ROY NORTON, M.D.

THE State Board of Health has purchased an Audiometer for testing the hearing of school children. This machine is very much like an ordinary phonograph, using flat circular disk records and instead of a loud speaker the sound is transmitted out to 40 ear phones. Thus the hearing of 40 children can be tested at one time. The record first in a woman's voice and then in a man's voice gives out a series of numbers decreasing in loudness until only those with more than average acuity of hearing can detect them. First the right ear is tested, and then the left ear. In this way, through a series of 4 tests, 2 with a woman's voice and 2 with a man's voice for each ear, the percentage of hearing loss for each ear is determined.

Miss Margaret M. Thompson, of Asheville, a master's degree graduate in nutrition and very much interested in hearing problems of children, since she herself has some hearing impairment, has been selected to begin work with this equipment in the Asheville City Schools. Dr. George M. Cooper, Assistant State Health Officer, has for several years wanted to begin some demonstration work to create interest in, and get something done for, growing children with defective hearing. Dr. Cooper has known from experience some of the handicaps that a loss of hearing can cause to an individual. Even though a great many of the conditions which cause defective hearing cannot be controlled directly, he feels that it is very important to know, at as early an age as possible, that a child is losing his or her hearing.

Money for purchasing the audiometer and getting the work started were obtained from Social Security funds of the Children's Bureau. In those cases where the condition is progressive, and not subject to medical control in the present state of our knowledge, lip reading can be taught and it is a well known fact that children learn lip reading much more easily than adults. In a few cases it will be found that a child is not doing well in school through poor hearing when all he or she needs is a careful cleaning out of the cerumen or wax which may become impacted in the ear canal. In some cases nutritional disturbances may have a bearing on the hearing difficulty and this can be corrected by proper diet. A great many cases of hearing loss have their origin in uncorrected defects and infections in the throat and nose. The most common cause of impaired hearing in infants and school children is perhaps adenoid growths over the eustachian tube openings. These adenoids not only cause impaired hearing by the growths overlying the tubal openings, but cause repeated infections to pass through the tubes and extend into the middle ears. Lack of adequate treatment in school age results in impaired hearing in adult life. By the audiometer test a large percentage of adult deafness can be prevented by adequate treatment of impaired hearing during the early stages of childhood. The earlier the treatment the better are the results.

It is estimated that one to four per cent of children have some impairment of hearing. With our state

public school enrollment of about 900,000, the problem is quite large, looking at the State as a whole. Some children may be moved to the front of the class room and be enabled to do better work. Grade repeating is a costly procedure. A child who is treated unfairly and who is suffering from any handicap will have increased difficulty in transforming into a useful citizen and his lack of adaptability may cause him to be an expense to the community. Finding those with beginning hearing impairment and teaching them lip reading will prove a great advantage, not only to the individual, but to the family, the school, and to the community.

It is planned that Miss Thompson will make audiometer tests of children of the second grade and above during the remainder of the school year. Teachers and local health departments will be given a report of the degree of hearing loss of each child tested. Parents who are able to afford it will be expected to take the child with impaired hearing to a specialist for further and more detailed examination and advice. The same service for hard of hearing children of poor parents will be obtained through cooperation of specialists, local health departments, welfare agencies, and interested local clubs. One of our states has a law providing lip reading classes at public expense where there are as many as ten hard of hearing children in the community. It is expected that this demonstration study will provide information from which future plans for better preventive methods and corrective care can be worked out for children threatened with deafness or hearing impairment in North Carolina.

"TO AMERICA'S SCHOOLS— YOUR HEALTH"

This is the title of the radio program which the American Medical Association and the National Broadcasting Company are now offering to the schools of this country once a week. While the program is especially planned for junior and senior high schools for the purpose of helping to illustrate, amplify and enrich the teaching of health in the schools, it loses none of its interest for listeners in the home.

Broadcasts for December will emphasize the importance of diet, in maintaining health and efficiency. Each week on Wednesday at 2 o'clock, Eastern Standard Time, over the red network, school teachers, students and stay-at-homes are invited to listen in on the Voices of Medicine when they will address their message of health education, with the musical theme, Hale and Hearty, and the toast, "To America's Schools—Your Health."

December's program is as follows:

December 1—Tuberculosis, Foe of Youth; how bad habits of hygiene and unwise living, plus infection, favor tuberculosis.

December 8—It Takes All Good Foods: a well rounded diet and how to get it.

December 15—Vitamins, Minerals and common Sense: more about a balanced diet in special relation to minerals and vitamins.

December 22—Dietary Fads: facts versus fallacies in relation to prevalent false notions about diet.

December 29—Milk from Farm to Table; the production, transportation, pasteurization and home care of milk; its place in the diet; processed milks.

Doing Something About Old Age

By MRS. J. HENRY HIGHSMITH

UNLIKE the weather, something can be done about growing old. To be sure, much can be done to defer decrepit old age, and what is more important, rid it of its dread and terror.

It has been said we are living in an ageless era, when science, education, and public health work have pushed back the frontiers of old age till it is now difficult to determine where the age line—old age—begins. Yesterday one was old at forty and forty-five. Today one is not old at sixty-five and seventy. Old age has been conquered. People are learning how to live, how to keep well and enjoy life fully to the end.

As Exhibit A we present Judge Robert Winston, who ten years ago, at the age of sixty-five, reentered the University of North Carolina. He dubbed himself, in his writings, "a freshman at sixty-five." Turning at that point from the practice of law to further study and historical writing, he has to his credit today three great biographies, and his autobiography, "It's a Far Cry," his latest book. And now we are told that he is at work on his fifth book.

While Judge Winston is a busy man, lecturing occasionally in addition to his writing, he takes pains to play, to rest, and to visit his hosts of friends. Today, at seventy-five, he is hale and hearty, hard working and happy.

Science, in recent years, has come to the rescue of old age. One need not now grow old and helpless prematurely. By taking advantage of every benefit, every discovery and bit of progress that medical science has made in recent years in the interest of prolonging life, one may live to a

ripe old age and find it profitable and pleasurable. However, no drug, elixir or quick and easy means has been found for deferring old age. The process is one of intelligent foresight and action on the part of the individual in regulating his living in accordance with health laws, and in taking advantage of what medical science has to offer. For instance, medical science has decreed that such degenerative conditions—those indicating a break-down of the body organs—as kidney trouble, heart disease, hardening of the arteries, high blood pressure, and diabetes, are not inevitable. They may be long deferred or prevented altogether. The oncoming of years does not necessarily mean the oncoming of disease.

The best procedure yet found for preventing the onset of degenerative diseases is the habit of going regularly to one's physician for a thorough physical examination, and following his suggestions closely. Oftentimes, simple measures like regulating one's diet, getting more sleep and rest, avoiding too strenuous exercise or labor, or ridding one's mind of fear or worry, are all that is needed to offset some tendency toward a serious disease. Yet this takes courage and determination—courage to seek to know, through a physical examination, what one's health needs are, and determination to meet these needs. The simplest way is to choose a good physician and take his counsel.

Dental science has also made its contribution to the art of staying off old age. Skilled workmanship, discovery of new anesthetics, and new processes of making dentures and treating defects of the mouth, make

it possible for one to have a comfortable, efficiently functioning mouth and teeth even in old age. This fact not only aids one's digestion and indirectly his health and longevity, but by improving his looks and keeping him young in appearance, it aids his mental processes and brightens his outlook on life.

By means of modern science vision and hearing also may be preserved, and one's enjoyment of life extended beyond his three score and ten mark. Crutches and even canes, except those carried for style, are being relegated to the past as orthopedics straightens limbs and makes cripples to walk.

In addition to what medical science, dentistry, and other material aids can do to halt the infirmities of age, there's much the individual can do to make this period not the worst but the best of life—"the last of life for which the first was made." Among the more practical ways, we suggest:

1. Keeping abreast of the times by reading the daily papers and current periodicals, by means of the radio, motion pictures, by conversing with friends, and by travel. There never has been such easy, comfortable and profitable means of traveling as is afforded today. It is a delightful diversion, and one that old people should enjoy frequently.

2. Keeping up interest in community, state and national life, and participating in home and community interests, a person should not lose interest in all life about him just because he is not as young as he once was. He should be interested in local politics and government, elections, the church, schools, clubs, civic and social organizations and all activities undertaken for the good of the community.

3. Holding old friends and making new ones when the opportunity presents itself. There is no easier way

to induce old age, loneliness and, worst of all, self-pity than by losing contact with friends and acquaintances. Drawing into one's shell should be deferred as long as possible.

4. Having some creative interest to turn to when the cares of home and family life are given up. Some people who are wise use this period for taking up some congenial work long deferred for want of time and leisure. Perhaps it was music, art, gardening, writing, or maybe it was collecting something with a peculiar fascination, or just a pet hobby. This is the time to follow after the desires of one's heart. The writer knows three women who turned to music for recreation and pleasure and who are now making a contribution to the cultural life of their communities, one by directing a church choir, another by serving as a pianist at Sunday School, and another by directing children's entertainments. For finding congenial interests among congenial group members, we recommend especially for women, active membership in the church and church school, in the Woman's Club, the Garden Club, book clubs, or even in a knitting club. For men we recommend, in addition to reading and maybe writing, such hobbies as growing flowers, vegetables, or raising chickens, pedigreed pigs or cows or some other congenial outdoor work. We would not omit playing golf for those who have the means. Men especially cannot afford to lead an idle, inactive life. The law with them is "do or die," especially if they have always been accustomed to a busy, active life.

5. Building up a philosophy that will recognize in life a divine plan, and the futility of man in rebelling against it. Such a philosophy will strengthen and sustain one in accept-

ing the inevitable with resignation and cheerfulness. It will help him to make proper adjustments to his surroundings and changed conditions. To rebel, to complain, to become cynical and intolerant will convert what should be the glorious and peaceful sunset of life into an inglorious and tragic ending.

6. Finally, there is no solace or comfort for old age comparable to true religion, and an implicit trust in God.

VOCATIONAL TOOLS

Two vocational pamphlets, "Nursing and How to Prepare For It" and "Nursing—A Profession for the College Graduate" are available to physicians who, in addition to their many other responsibilities, must often act as vocational advisors and confidants to their young patients.

These two pamphlets, which slip easily into any inside coat pocket, suggest answers to such questions as "Will I make a good nurse?"; "Is there a future in nursing for me?"; "What nursing schools shall I enter?". They outline the general admission requirements of nursing schools, provide criteria for choosing a nursing school, and discuss briefly the opportunities within the nursing profession.

The pamphlets have been prepared by the Nursing Information Bureau of the American Nurses' Association, which cooperates closely with the National League of Nursing Education and the National Organization for Public Health Nursing. Physicians who wish to have copies of them either for reference or to give to some of their interested young patients, may secure them, free of charge, from the address given below:

Address—Secretary, N. C. State Nurses Ass'n, 215 N. Myers St., Charlotte, N. C.

BOOK REVIEW

THE TRAFFIC IN HEALTH: A Discussion of Patent Medicines and Cosmetics. By CHARLES SOLOMON, M.D. Navarre Publishing Company, Inc., 10 East 43rd Street, New York City. Price \$2.75.

Viewing the patent medicine racket as a disease of industry and society, Dr. Solomon takes the case, studies its etiology and pathological symptoms and unreservedly makes his prognosis. Hope for the patient's recovery lies in educating the public in the light and spirit of modern science. By way of proceeding to enlighten the consuming public, the author tears away the veil of mystery and secrecy from the patent medicine business and shows up its fraudulent nature in all its varying aspects.

The book is written with the understanding of a physician and in the helpful spirit of a teacher. The author has at heart the interest and well-being of the average citizen who through ignorance is too often fleeced of his health and his money. He pleads for an educated public whose opinion and action backed up by science, will be able to secure legislation that will regulate what has become one of the country's biggest businesses.

The book is free of bitterness and satire, and yet it has a seriousness of purpose that holds and convinces the reader. The stories of ancient frauds and customs are delightfully told and are paralleled with today's extravagant modes and practices, especially in the search for beauty. Every woman will be eager to know the underlying facts concerning the great cosmetic urge of today.

A subtle vein of humor runs through the book and at the end there is the healing touch of the understanding physician, which enhances the worth of an already valuable book.—K. H. H.

Public Health Work Helps Private Practitioners

By FOREST M. HOUSER, A.B., M.D., Cherryville, N. C.

HAVE you ever stopped to recapitulate how often you have called upon the State Board of Health or the State Laboratory of Hygiene for information concerning statistics, prenatal pamphlets, mailing cases for different laboratory examinations, or the many other services obtained from these and the county health departments?

The physicians who practice in the larger cities of the state have access to private laboratories, larger libraries, and are not as dependent upon the state and county health departments as we who have cast our lot among the small town and rural populations. It is my opinion that I, and the majority of other physicians so located as I, use the services of our health departments on the average of at least once daily. I know that it would be real difficult for me to practice medicine in my locality without the aid of the departments.

It has been appropriately said that a general practitioner in a small industrial or rural community treats the skin and its contents. In order that one's patients receive the treatment they should, it is imperative that the physician have at his command some good laboratory and reasonably priced biologicals and vaccines for certain of his patients.

Although diphtheria is on the decrease I know that eighty per cent of the patients I have treated for the malady could not have paid five dollars for ten thousand units of anti-toxin, but they could pay fifty cents, the cost of that dispensed by the State Board of Health. Should our patients be able to scrape together enough money to buy anti-toxin sold

by commercial houses they could never get an additional amount to pay the physician for his services, but when they can obtain the anti-toxin at a reasonable fee they can pay for medical services. In my opinion, this one item, small as it is, is a life saver for many children and indirectly puts money into the pockets of physicians which otherwise they could not have collected.

It is impossible for anyone to do general practice without blood waserman tests, dark-fields, sputum and feces examinations, blood cultures and agglutination tests. Should physicians have to depend on private laboratories for the above, a vast majority that have been and are being done, could not have been done. I have no way of evaluating the actual saving over what might be called retail price, the cost for this service by private laboratories, for these services being offered us by the state free of charge.

Aside from the actual savings to our poorer patients for serums, and to us physicians for laboratory work, there is a greater service offered by our health departments. The matter of educating the public, through placards and the Health Bulletin which is published monthly, is of great assistance to physicians. There are many people who read every Bulletin published and follow its teachings. The Health Bulletin warns the people of our state against self medication, it warns them against the inert and at times dangerous patent medicines. The Bulletin also calls to their attention certain symptoms which should be looked into, and the reader immediately consults his physician.

In my opinion, it is a wonderful medium through which the people of the state are brought to their physicians with minor symptoms which later would probably result in a serious malady. The Bulletin acquaints them with the necessity of periodic health examinations, thereby decreasing that everlasting shock that comes daily to some family, death from acute conditions that could perhaps have been prevented; or from a long lingering illness of cancer or tuberculosis as well as some of the other constitutional diseases that could have been ameliorated if not cured. We all know that we cannot cure many of the constitutional diseases, but by learning of them in their incipency, educating the afflicted to live with the disease rather than doing those things that would be detrimental to them, we can offer the sufferer a prolonged, more happy, and more abundant life.

By their consistent and persistent dingdonging on the unsuspecting public of the possibility of preventing many acute maladies by vaccination, both by education and by actually holding vaccine clinics for the indigent, the state and county health departments are decreasing, and in some instances practically eradicating many of the communicable diseases. Typhoid fever is almost a thing of the past. Twenty years ago as a child, I rode with my father, a general practitioner, and each year he would make almost a house to house canvass, visiting typhoid fever patients, many times the whole family was in bed with this disease. During my eight years of practice in the same community, I have averaged one case of typhoid fever a year. Of course, improved sanitary conditions and vaccinations have caused the change. Who caused the change in hygienic conditions and educated the

people of the state as to the necessity of vaccination? The state and county health departments.

Have these changes been made to the detriment of the physicians of the state? No. They have been made with the whole cooperation of the State Medical Society as well as with the cooperation of the individual physicians of the state. In counties that have full time health officers, the county officer comes into the community and vaccinates. He also advertises the necessity of being vaccinated which sends many of the pay patients to the physician's office. I have never seen anything but harmony result from such clinics, and in my community the clinic has tended to increase my income by its advertising, rather than decrease it by holding such clinics.

Typhoid fever is not the only disease that has been practically eradicated by the efforts of the state and county health departments cooperating with the physicians. Diphtheria has come in for its slap in the face by the same token as was used to curb typhoid fever. Tuberculosis, the great white plague of the past, is much decreased by the combined efforts of the health departments and the State Tuberculosis Sanatorium, with the cooperation of the physicians. No one could estimate the value to the state by the health departments in tuberculosis alone. In my county, and I presume in all that have health departments, just as soon as my report of a case of tuberculosis reaches the department of health, a nurse, who is well grounded in the proper procedures necessary in combating and controlling this disease, is sent to visit the patient at home. The nurse teaches all the necessary precautions to effect a cure and prevent the spread of the disease. It takes much time and worry from the phy-

sician to have such splendid cooperation, absolutely free to the patient. By such work of the county health department, the tuberculosis victims are brought to know what is best for them, their family, and the community. At the same time they are cemented tighter to their physician, knowing that he will do all that is necessary and can be done for the patient.

Not so long ago the Surgeon General declared war on venereal diseases, syphilis especially. What could the Surgeon General have done by his own efforts alone? Very little. The health departments came to the call to arms and by advertising through all legitimate media have made the whole United States venereal disease conscious. What will be the outcome of this campaign? Syphilis will be decreased from 10% of the population to a minimum in the future. Did the health department stop when they had aided in enlightening the people? Did they set up agencies to treat the afflicted in competition with the licensed physicians? No. But they did work day and night in their laboratory doing dark-field examinations and Wassermann tests, cooperating with physicians to establish a diagnosis. I know that just as sure as there was the fear of syphilis put into the minds of our people, the increased demand on our laboratory was great, they did not grumble, but went faithfully to work within their already over-taxed laboratory, to cooperate with you and me in this great war. The state health department did not stop at this, but went so far as to contract with dependable manufacturing pharmaceutical houses to obtain for you and me arsenicals and distilled water at a much reduced rate so that we could care for the innocent as well as the Tomcat Syphilitics, the poor

as well as the rich.

I could go on enumerating different diseases that have been decreased by the health departments cooperating with the physicians of the state. Every one knows what other great strides are being made by these combined efforts.

The matter of placarding and quarantining those diseases that should be placarded and quarantined is no small matter. We make a diagnosis of a reportable disease, we report it and then the health department does the rest for us as far as placarding is concerned. They also leave valuable information, written so the laity can understand it, on the specific disease. This is all much to the advantage of the physician caring for the case.

I think that no doubt you see just how much work the efforts of the departments of health have taken from the shoulders of the physicians of the state. They do their work in complete harmony with the physicians. I know that our own county health officer wishes at all times to do that which the physicians in the county would have him to do. As I see it, there is no conflict or competition between the work of the health departments and the physicians, we all work together to a certain end: the good of the state in matters of health and disease.

I do not know whether you have given it any thought or not, but just for a minute sum up in your own mind the type of health officer you have to work with you. I know a large number of them and all are splendid men. Personality is a feature with each and every one. They are well prepared for their work. No longer do they select some worn out physician or one who cannot make a living in private practice, but select smart young men who are willing to take

special training in the field in which they expect to spend their energies. Why can our state department of health do this? Because it is free from the stains of political influence. It is free from the stains of political influence because it directs itself along ethical and legitimate lines. As I have said before, it is an agency established by and to cooperate with the medical profession for the good of the state. By virtue of the fact that for three years I was privileged to be on the executive committee of the State Medical Society, I know for a fact that our state health officers have, and, do consult the State Medical Society in all major undertakings. Dr. Parrot in his lifetime, and Drs. Reynolds and Cooper consult the medical Society always before undertaking any major step along their lines, or before they will tie up with any private or Federal funds to be administered to the people of this state. They are always awake to the fears and possibilities of state medicine and I think that I know them well enough to say that they would fight to the last breath to prevent any calamity besetting the physicians of this state.

What does such splendid and co-operative service to the physicians of the state cost the people of the state? In my county the cost runs about two cents per one hundred dollars of taxable property. I understand that the average over the whole state is three to four cents. Is it worth it to the people of the state and to the medical profession to have such splendid aid for the cost? It appears to me that it is worth its cost many times. I believe that if you would only reflect for a few minutes you would be at a loss to name any other convenience or service you obtain with such satisfaction and so pleasantly that costs so little.

TUBERCULOSIS DON'TS

1. DON'T think you need fear fresh air if your body is properly protected by clothing. Be an outdoor fan.
2. DON'T think there are better tonics for a tuberculosis body than rest, fresh air and good food. There are not.
3. DON'T underestimate the tubercle bacillus. It doesn't pay.
4. DON'T think, because your temperature is normal and you weigh more than ever before in your life, that you are cured. You are not.
5. DON'T think you do not have to live carefully because you have left the sanatorium. You do.
6. DON'T think you can be careless about the disposal of your sputum and play the game fair. You cannot.
7. DON'T think, because you have tuberculosis, you cannot be of use to the world. Think of Trudeau.
8. DON'T think that you will not need patience. You will.
9. DON'T think tuberculosis can be cured quickly. It can't be done.
10. DON'T think you are putting it over on the doctor if you don't play fair. It works both ways.
11. DON'T think the doctor is too busy to answer questions. He is not.
12. DON'T think the other fellow is worse than you and be afraid of him.

Northampton County Health Department Making a Record

JUST as we were ready to go to press for this issue, we received a copy of the Northampton report for the third quarter of 1937 covering the activities of the county health department in Northampton County. This department was completely reorganized, and Dr. W. R. Parker assumed his duties as health officer of that county on July 1. Dr. Parker for several years had been a practicing physician at Woodland in that county. Last spring, however, he successfully completed the course for public health officers at the University of North Carolina and was, therefore, fully qualified to take over the duties of the office. We want to request each one of our readers to give special attention to the reading of this brief report. This report of Dr. Parker's plainly shows what can be accomplished in any county in North Carolina which has a health officer who really takes his job seriously. The report follows:

"The newly organized Health Department entered upon its duties with much interest and enthusiasm and was pleasantly received by the old members of the department.

"The State Department kindly sent us Mr. J. T. Welch, a recent graduate from the University of North Carolina, to assist us in the inspection of cafes, hotels, and in carrying on our privy project, the most essential single piece of sanitation in our county.

"During this quarter we have had three cases of typhoid fever, two being located on the same farm and here it is interesting to note that open wells were used and no privies whatsoever, bad housing, no screens, and upon bacteriological examination of the water it was found to contain *B. coli* in 1cc portions. The third case of typhoid was a small child

and had moved to Northampton County from Baltimore in June and had never been vaccinated.

"Our typhoid immunization campaign has been completed and around 3,000 individuals were given the complete treatment.

"We had a very successful tonsil and adenoid clinic in the county for both white and colored children. All white children were taken care of at the hospital and the Rich Square Institute building was used for the Negro children. One hundred and twenty-four children were operated on. Sixty-three of this number were Negro children.

"August was the beginning of the Maternity and Infancy clinics, the first ever organized in the county, and during the two months seventy ante-partums have been examined and five expectant mothers were found with positive wassermanns. All of these are being treated by private physicians or in the Health Department. In our M&I clinic we have examined 118 children and made permanent records. Thirty-six children have been given toxoid and 70 have been vaccinated against smallpox. The private physicians have assisted us greatly in these clinics, thereby being of much value to our program.

"Mrs. H. P. Guffy was kindly loaned to us by Dr. Cooper for two or three months to assist us in our tuberculosis clinic and the examination of school children and midwife classes. She has examined about half of the white school children and it is distressing to note the number of underweights found, others with poor vision, diseased tonsils, faulty posture, bad breathing, and various other defects.

"Midwife classes are being conducted and after a series of lessons certificates will be given to those entitled to have them. Midwives deliver about sixty per cent of the babies in our county

and with a falling birth rate we are extremely anxious to save the crop of babies that we do have by informing these midwives and teaching them the rudiments of cleanliness and antiseptics.

"Tuberculosis is found over the entire county. Many active cases have been found in homes with large families and the sanitary conditions and precautions sadly neglected. There are many cases needing hospital treatment. Others need to be isolated and a county sanatorium is badly needed right now and Burr cottages could be used temporarily to great advantage.

"In several instances drinking water has been found to contain bacteria of typhoid and dysentery. Open wells should be closed and must be for sanitary purposes.

"Venereal diseases are prevalent throughout the county and very little has been done about it. During the month of September our blood examinations were 20 per cent positive for syphilis. The Health Department is almost helpless without the support of the housewives and citizens of the county.

"School examinations, midwife classes and tuberculosis examinations will continue throughout the last quarter of the year."

A Few Items From a Nurse's October Report

"I have traveled 1,232 miles this month, including one trip to Charlotte with children for orthopedic treatment and a trip to Lenoir for the same purpose. Two children suffering from orthopedic troubles and who had been supplied with braces were taken to the Lenoir clinic for better adjusting of the braces. At the same time, two children were taken for examination for the first time. Both were accepted for hospitalization. One girl in the mountains suffering from a very bad case of bone infection was brought in a straight chair placed on a sled across the impassable ravines and ditches and rocks to a

road on which I was able to get my car. We placed her in the car and by five P. M. I had her in Charlotte in the hospital. She is improving wonderfully at this time. Six other children were located and transportation provided for a visit to a diagnostic clinic at Newland on October 30. One of these children was met at the foot of the mountain trail at seven in the morning and returned to a point within three miles of his home late that afternoon.

"One small school in the county I find this week closed on account of scarlet fever. A physician had visited one home and made a diagnosis of scarlet fever. Two other children were ill in homes nearby, but no physician had been summoned. Presumably, both of them have had scarlet fever, and I have endeavored to get a physician to see them.

"In addition to the foregoing, we have found 56 children who have had their tonsils removed during the last two years and 34 who have been to town to the dentist and had their teeth filled, but we have found this month 60 children with deficient vision, some of them almost blind, more than 100 that have very bad throats, and 582 children who had decaying teeth needing immediate attention. We have found 49 children suffering badly from scabies or impetigo. We have found two children almost completely deaf and three children with orthopedic defects needing attention, for which arrangements have been made to take them to the Lenoir clinic. These three children were noticed on the highway on their way to school, their names and addresses were secured, and their parents visited, where it was found that lack of funds had prevented the proper treatment, as they had no way to provide transportation even to any of the free clinics."

What Do You Think?

By N. C. TUBERCULOSIS ASSOCIATION

TUBERCULOSIS has been responsible for the deaths of more than 50,000 North Carolinians in the last 25 years. We think that is a tragedy. What do you think?

Tuberculosis, in spite of a great decline in the death rate from this disease, took the lives of 2096 North Carolinians last year. We think this is entirely too heavy a toll to pay for ignorance and indifference. What do you think?

The death rate of tuberculosis in North Carolina is higher than that of the country as a whole and of some of the other Southern States. We think it should be lowered to at least the level of the rate in the United States Registration Area. What do you think?

Tuberculosis is caused only by the tubercle germ. Open cases spread the germs of the disease to others. The most of our tuberculosis is not found until it is moderately or even far advanced. Yet we have all the knowledge necessary for finding it before serious damage is done. We think it should be found early, isolated and properly treated. What do you think?

Some school teachers in North Carolina have been found spreading tubercle germs among their students. There is a State Health Department regulation requiring all teachers and janitors to be free from active tuberculosis. We think this should be strictly enforced. What do you think?

We think that the knowledge concerning the value of the tuberculin test and the X-ray in finding tuberculosis early should be spread everywhere and applied by all physicians. What do you think?

We think that every school boy or girl entering competitive athletics should be given the tuberculin test and that all reactors should be X-rayed. Further than that, we think that all high school students should have the advantage of this procedure as a matter of routine. What do you think?

We think more knowledge is essential to solution of the tuberculosis problem and that the Early Diagnosis Campaign offers a splendid opportunity for spreading this knowledge. What do you think?

We think educating the public in regard to tuberculosis is a worthwhile task and that everybody should accept some measure of responsibility for its accomplishment. What do you think?

We think that the war against tuberculosis is one in the prosecution of which you have a part to perform. What do you think?

BOOK ON MATERNAL CARE OFFERED PHYSICIANS

The State Board of Health has purchased a limited supply of the excellent handbook on MATERNAL CARE, edited by Dr. F. L. Adair of Chicago. Any practicing physician of North Carolina doing obstetrical work may have a copy of this book free of charge by writing to Dr. G. M. Cooper, Assistant State Health Officer, State Board of Health, Raleigh, N. C. This offer holds good until the limited supply is exhausted. This book edited by Dr. Adair is approved by the American Committee on Maternal Welfare. Dr. Adair was aided in its preparation by such obstetricians as Dr. G. W. Kosmak and Dr. J. R. McCord, all well known to North Carolina physicians.



